



# STIC Search Report

## EIC 1700

STIC Database Tracking Number: 135832

To: Lien Tran  
Location: REM 8A39  
Art Unit : 1761  
October 27, 2004  
Case Serial Number: 09/965113

From: John Calve  
Location: CP 3/4; 3D62  
Phone: 2-3519

[John.Calve@uspto.gov](mailto:John.Calve@uspto.gov)

### Search Notes

Hi Lien,

I searched 5 files: HCA, Derwent, Agricola (agriculture) and two food files: FSTA and FROSTI. I searched the claims as broadly as possible, and printed out quite a few records.

You requested that polyglycerol was esterified not more than 40%. Just so you know, it is impossible to search for something like this. I searched for glycerols being esterified and also the fatty acids esterified. But I couldn't search the degree to which the esterification took place.

If you have any questions, please feel free to call me.

John

Access DB# 135832

## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: LIEN TRAN Examiner #: 70684 Date: 10/22/04  
 Art Unit: 1761 Phone Number 301-21403 Serial Number: 591965113  
 Mail Box and Bldg/Room Location: REM 8A39 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Emulsifier System

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: 9/26/2000 US 20020061354 pp

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search:  
 ✓ → colloid? suspension? gel?  
 emulsifier comprising 50-99% polyglycerol  
 ester wherein not more than 40%  
 of the hydroxyl group (OH group)  
 are esterified with fatty acid.

Reg #s ⇒ HCA

emulsifier comprising 50-99% polyglycerol  
 ester wherein not more than 40%  
 of the hydroxyl group (OH group)  
 are esterified with fatty acid.

- "free poly/OC" → polymerized glycol.
- polyglycerol backbone, + fatty acid → ester. + monoglyceride
- PEG-polyglycerol esterif. w/ F/A.
- glycerol/polyglycerol/sorbitol/sorbitan (ester)  
 ? ethanediol? propanediol?
- Oleic / linoleic, linolenic, octadecadenoic, eleostearic,  
 - glyceride, triglyceride?

## STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>J. Calve</u>	NA Sequence (#) _____	STN _____
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: <u>10/27/04</u>	Bibliographic _____	Dr. Link _____
Date Completed: <u>10/27/04</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: _____	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: _____	Other _____	Other (specify) _____

=> d his nofile

(FILE 'HOME' ENTERED AT 10:20:23 ON 27 OCT 2004)

FILE 'LREGISTRY' ENTERED AT 10:21:28 ON 27 OCT 2004

L1 STR  
L2 STR  
L3 23 SEA SSS SAM L1 AND L2

FILE 'REGISTRY' ENTERED AT 10:24:18 ON 27 OCT 2004

L4 50 SEA SSS SAM L1 AND L2  
L5 16 SEA ABB=ON PLU=ON L4 AND 2-4/NC  
D SCAN

FILE 'HCA' ENTERED AT 10:25:44 ON 27 OCT 2004

E US20020061354/PN  
L6 1 SEA ABB=ON PLU=ON US2002061354/PN  
SEL L6 RN

FILE 'REGISTRY' ENTERED AT 10:26:02 ON 27 OCT 2004

L7 8 SEA ABB=ON PLU=ON (12441-09-7/BI OR 112-80-1/BI OR 121854-29-  
3/BI OR 1310-73-2/BI OR 1338-43-8/BI OR 143-19-1/BI OR  
155215-70-6/BI OR 26266-57-9/BI)  
D SCAN

FILE 'LREGISTRY' ENTERED AT 10:26:13 ON 27 OCT 2004

L8 SCR 2043  
L9 SCR 1918

FILE 'REGISTRY' ENTERED AT 10:26:59 ON 27 OCT 2004

L10 50 SEA SSS SAM L1 AND L2 NOT L8  
L11 50 SEA SSS SAM L1 AND L2 NOT (L8 OR L9)

FILE 'LREGISTRY' ENTERED AT 10:27:50 ON 27 OCT 2004

L12 SCR 2036  
L13 19 SEA SSS SAM L1 AND L2 NOT (L8 OR L9 OR L12)  
D QUE STAT L13

FILE 'REGISTRY' ENTERED AT 10:30:05 ON 27 OCT 2004

L14 50 SEA SSS SAM L1 AND L2 NOT (L8 OR L9 OR L12)  
D QUE STAT L14  
L15 STR L2  
L16 15 SEA SSS SAM L1 AND L15 NOT (L8 OR L9 OR L12)  
D QUE STAT L16

FILE 'LREGISTRY' ENTERED AT 10:34:29 ON 27 OCT 2004

FILE 'REGISTRY' ENTERED AT 10:54:44 ON 27 OCT 2004  
D SCAN L7

FILE 'LREGISTRY' ENTERED AT 10:55:07 ON 27 OCT 2004

E POLYGLYCEROL/CN  
L17 1 SEA ABB=ON PLU=ON POLYGLYCEROL/CN  
D SCAN  
D L17 RN

FILE 'REGISTRY' ENTERED AT 10:55:54 ON 27 OCT 2004

L18 374 SEA ABB=ON PLU=ON 25618-55-7/CRN

L19 258 SEA ABB=ON PLU=ON L18 AND 1-3/NC  
E POLYGLYCEROL/CN  
L20 1 SEA ABB=ON PLU=ON POLYGLYCEROL/CN  
D SCAN

FILE 'LREGISTRY' ENTERED AT 10:57:59 ON 27 OCT 2004

FILE 'LCA' ENTERED AT 11:14:35 ON 27 OCT 2004

L21 713 SEA ABB=ON PLU=ON POLYOL? OR GLYCEROL? OR POLYGLYCEROL? OR  
POLY(W)GLYCEROL## OR ?ETHANEDIOL? OR ?ETHANETRIOL? OR ?PROPANED  
IOL? OR ?PROPANETRIOL? OR ?BUTANEDIOL? OR ?BUTANETRIOL?  
L22 951 SEA ABB=ON PLU=ON FATTY#(2A)ACID#### OR OLEIC# OR LINOLEIC#  
OR OCTADECATRIENOIC# OR OCTADECADIENOIC# OR OCTADECANOIC# OR  
SEPTADECANOIC# OR HEPTADECANOIC# OR PENTADECANOIC#  
L23 365 SEA ABB=ON PLU=ON ESTERIF?  
L24 209 SEA ABB=ON PLU=ON GLYCERIDE#  
L25 786 SEA ABB=ON PLU=ON L21 OR SORBITOL# OR SORBITAN#  
L26 2834 SEA ABB=ON PLU=ON (COMP# OR COMPOSIT? OR DISPERS? OR  
SUSPENS? OR MIXTURE? OR BLEND? OR ADMIX? OR COMMIX? OR COMMIX?  
OR INTERMIX? OR COMPSN# OR COMPN# OR FORMULAT? OR INTERSPER?)/T  
I  
L27 2934 SEA ABB=ON PLU=ON EMULS? OR DISPERS? OR SUSPENS? OR COLLOID?  
OR ADMIX? OR COMMIX? OR COMMIX? OR INTERMIX? OR INTERSPER?

FILE 'REGISTRY' ENTERED AT 11:22:46 ON 27 OCT 2004

E SORBITOL/CN  
L28 1 SEA ABB=ON PLU=ON SORBITOL/CN  
D SCAN  
E ETHANEDIOL/CN  
E ETHANETRIOL/CN  
L29 1 SEA ABB=ON PLU=ON ETHANETRIOL/CN  
D SCAN  
E PROPANEDIOL/CN  
L30 1 SEA ABB=ON PLU=ON PROPANEDIOL/CN  
E PROPANETRIOL/CN  
L31 2 SEA ABB=ON PLU=ON PROPANETRIOL/CN  
E OLEIC/CN  
L32 1 SEA ABB=ON PLU=ON "OLEIC ACID"/CN  
E LINOLEIC ACID/CN  
L33 1 SEA ABB=ON PLU=ON "LINOLEIC ACID"/CN  
L34 3 SEA ABB=ON PLU=ON L7 AND ACID  
D SCAN  
E SORBITAN TRIOLEATE/CN  
E SORBITAN STEARATE/CN  
L35 1 SEA ABB=ON PLU=ON "SORBITAN STEARATE"/CN  
E SORBITAN TRISTEARATE/CN  
L36 1 SEA ABB=ON PLU=ON "SORBITAN TRISTERATE"/CN  
E POLYSORBATE/CN

FILE 'LCA' ENTERED AT 11:28:27 ON 27 OCT 2004

FILE 'HCA' ENTERED AT 11:29:36 ON 27 OCT 2004

L37 18077 SEA ABB=ON PLU=ON L28 OR L29 OR L30  
L38 318210 SEA ABB=ON PLU=ON POLYOL? OR GLYCEROL? OR POLYGLYCEROL? OR  
POLY(W)GLYCEROL## OR ?ETHANEDIOL? OR ?ETHANETRIOL? OR ?PROPANED  
IOL? OR ?PROPANETRIOL? OR ?BUTANEDIOL? OR ?BUTANETRIOL?  
L39 330071 SEA ABB=ON PLU=ON L37 OR L38 OR GLCEROL  
L40 113332 SEA ABB=ON PLU=ON L31 OR L32 OR L33



L41 336167 SEA ABB=ON PLU=ON FATTY#(2A)ACID#### OR OLEIC# OR LINOLEIC#  
OR OCTADECATRIENOIC# OR OCTADECADIENOIC# OR OCTADECANOIC# OR  
SEPTADECANOIC# OR HEPTADECANOIC# OR PENTADECANOIC#  
L42 387593 SEA ABB=ON PLU=ON L40 OR L41 OR FATTY(W)ACID  
L43 50908 SEA ABB=ON PLU=ON L34 OR L35 OR L36  
D SCAN L6  
L44 63405 SEA ABB=ON PLU=ON L43 OR SORBITAN#  
L45 8010 SEA ABB=ON PLU=ON L44 (L)ESTER?

FILE 'LCA' ENTERED AT 11:34:03 ON 27 OCT 2004

FILE 'HCA' ENTERED AT 11:35:56 ON 27 OCT 2004

L46 66441 SEA ABB=ON PLU=ON L39 (L)?ESTER?  
L47 304860 SEA ABB=ON PLU=ON L41 (L) (FATTY? OR ESTER?)  
L48 299036 SEA ABB=ON PLU=ON (L40 OR L42) (L) FATTY?  
L49 109047 SEA ABB=ON PLU=ON (L40 OR L42) (L)?ESTER?  
L50 98727 SEA ABB=ON PLU=ON L48 AND L49  
L51 12784 SEA ABB=ON PLU=ON L46 AND L50  
L52 11569 SEA ABB=ON PLU=ON L51 AND 1907-2000/PY, PRY  
L53 1756 SEA ABB=ON PLU=ON L52 AND L44  
L54 480 SEA ABB=ON PLU=ON L26 AND L53  
L55 1141483 SEA ABB=ON PLU=ON EMULS? OR DISPERS? OR SUSPENS? OR COLLOID?  
OR ADMIX? OR COMMIX? OR COMMIX? OR INTERMIX? OR INTERSPER?  
L56 210 SEA ABB=ON PLU=ON L54 AND L55  
L57 29681 SEA ABB=ON PLU=ON PEG#  
L58 12 SEA ABB=ON PLU=ON L56 AND L57  
L59 510779 SEA ABB=ON PLU=ON 17/SX, SC  
L60 45 SEA ABB=ON PLU=ON L56 AND L59  
L61 17824 SEA ABB=ON PLU=ON MONOGLYCERIDE? OR (MONO# OR DI#) (2A) GLYCERI  
DE## OR DIGLYCERIDE##  
L62 19 SEA ABB=ON PLU=ON L60 AND L61  
L63 3 SEA ABB=ON PLU=ON L58 AND L61  
L64 269 SEA ABB=ON PLU=ON DATEM# OR PGME# OR DGME#  
L65 1 SEA ABB=ON PLU=ON L60 AND L64  
L66 1 SEA ABB=ON PLU=ON L56 AND L64  
L67 1 SEA ABB=ON PLU=ON L54 AND L64  
L68 57 SEA ABB=ON PLU=ON L58 OR L60 OR L62 OR L63 OR L65 OR L66 OR  
L67

FILE 'LCA' ENTERED AT 11:44:53 ON 27 OCT 2004

FILE 'WPIX' ENTERED AT 11:48:27 ON 27 OCT 2004

L69 77119 SEA ABB=ON PLU=ON L22 OR FATTY(W)ACID  
L70 25547 SEA ABB=ON PLU=ON ESTERIF?  
L71 6741 SEA ABB=ON PLU=ON L24 OR GLYCERIDE#  
L72 149796 SEA ABB=ON PLU=ON L21 OR SORBITOL##  
L73 8051 SEA ABB=ON PLU=ON SORBITAN#  
L74 772087 SEA ABB=ON PLU=ON (COMP# OR COMPOSIT? OR DISPERS? OR  
SUSPENS? OR MIXTURE? OR BLEND? OR ADMIX? OR COMMIX? OR COMMIX?  
OR INTERMIX? OR COMPSN# OR COMPN# OR FORMULAT? OR INTERSPER?)/T  
I  
L75 122060 SEA ABB=ON PLU=ON L 27 OR EMULSION  
L76 19613 SEA ABB=ON PLU=ON PEG# OR DATEM# OR PGME# OR DGME#  
L77 30396 SEA ABB=ON PLU=ON L69(3A)ESTER? OR L72(3A)ESTER?  
L78 1790 SEA ABB=ON PLU=ON L77 AND L71  
L79 383 SEA ABB=ON PLU=ON L78 AND L73  
L80 206 SEA ABB=ON PLU=ON L79 AND L72  
L81 63 SEA ABB=ON PLU=ON L80 AND L75

L82 63 SEA ABB=ON PLU=ON L81 AND L75  
L83 14 SEA ABB=ON PLU=ON L82 AND L76  
L84 4314 SEA ABB=ON PLU=ON MONOGLYCERIDE? OR (MONO# OR DI#) (2A) GLYCERI  
DE## OR DIGLYCERIDE##  
L85 8 SEA ABB=ON PLU=ON L83 AND L84  
L86 35 SEA ABB=ON PLU=ON L82 AND L84  
L87 20 SEA ABB=ON PLU=ON L86 AND L74  
L88 7 SEA ABB=ON PLU=ON L85 AND L74  
L89 20 SEA ABB=ON PLU=ON L88 OR L87

FILE 'LCA' ENTERED AT 11:55:27 ON 27 OCT 2004

FILE 'WPIX' ENTERED AT 11:56:38 ON 27 OCT 2004

E A23L001/IC

L90 89800 SEA ABB=ON PLU=ON A23L001/IC  
L91 1 SEA ABB=ON PLU=ON L89 AND L90  
L92 10 SEA ABB=ON PLU=ON L82 AND L90  
L93 18 SEA ABB=ON PLU=ON L80 AND L90  
L94 8 SEA ABB=ON PLU=ON (L91 OR L92 OR L93 ) AND L74  
L95 18 SEA ABB=ON PLU=ON (L91 OR L92 OR L93 )  
L96 18 SEA ABB=ON PLU=ON L94 OR L95  
L97 7 SEA ABB=ON PLU=ON L96 AND EMUL?/TI  
D SCAN  
L98 64756 SEA ABB=ON PLU=ON EMUL?/TI  
L99 10 SEA ABB=ON PLU=ON L89 AND L98  
L100 16 SEA ABB=ON PLU=ON L97 OR L99  
L101 11 SEA ABB=ON PLU=ON L95 NOT L100

FILE 'AGRICOLA' ENTERED AT 12:01:02 ON 27 OCT 2004

L102 30294 SEA ABB=ON PLU=ON L22 OR FATTY(W)ACID  
L103 2251 SEA ABB=ON PLU=ON ESTERIF?  
L104 379 SEA ABB=ON PLU=ON L24 OR GLYCERIDE#  
L105 5774 SEA ABB=ON PLU=ON L21 OR SORBITOL##  
L106 70 SEA ABB=ON PLU=ON SORBITAN#  
L107 71882 SEA ABB=ON PLU=ON (COMP# OR COMPOSIT? OR DISPERS? OR  
SUSPENS? OR MIXTURE? OR BLEND? OR ADMIX? OR COMMIX? OR COMMIX?  
OR INTERMIX? OR COMPSN# OR COMPN# OR FORMULAT? OR INTERSPER?)/T  
I  
L108 2736 SEA ABB=ON PLU=ON L 27 OR EMULSION  
L109 859 SEA ABB=ON PLU=ON PEG# OR DATEM# OR PGME# OR DGME#  
L110 406 SEA ABB=ON PLU=ON (L102 OR L105) (3A) L103  
L111 21 SEA ABB=ON PLU=ON L110 AND L107  
L112 1 SEA ABB=ON PLU=ON L111 AND L108  
D SCAN  
L113 0 SEA ABB=ON PLU=ON L111 AND L109  
L114 4560 SEA ABB=ON PLU=ON EMUL?  
L115 1 SEA ABB=ON PLU=ON L111 AND L114  
D SCAN

FILE 'FSTA, FROSTI' ENTERED AT 12:04:20 ON 27 OCT 2004

L116 60423 SEA ABB=ON PLU=ON L22 OR FATTY(W) ACID  
L117 6136 SEA ABB=ON PLU=ON ESTERIF?  
L118 4456 SEA ABB=ON PLU=ON L24 OR GLYCERIDE#  
L119 15100 SEA ABB=ON PLU=ON L21 OR SORBITOL##  
L120 714 SEA ABB=ON PLU=ON SORBITAN#  
L121 53633 SEA ABB=ON PLU=ON L26  
L122 14624 SEA ABB=ON PLU=ON L 27 OR EMULSION  
L123 686 SEA ABB=ON PLU=ON PEG# OR DATEM# OR PGME# OR DGME#

L124 72948 SEA ABB=ON PLU=ON L116 OR L119  
L125 2951 SEA ABB=ON PLU=ON L124 AND L117  
L126 363 SEA ABB=ON PLU=ON L125 AND L118  
L127 30 SEA ABB=ON PLU=ON L125 AND L120  
L128 57 SEA ABB=ON PLU=ON L126 AND L121  
L129 8 SEA ABB=ON PLU=ON L128 AND EMUL?  
L130 20 SEA ABB=ON PLU=ON L127 AND EMUL?  
L131 28 SEA ABB=ON PLU=ON L130 OR L129  
E EMULSIFIER/CT  
L132 6675 SEA ABB=ON PLU=ON (EMULSIFIER/CT OR "EMULSIFIER # ADVANTAGES"  
/CT OR "EMULSIFIER AGENT"/CT OR "EMULSIFIER BEADS"/CT OR  
"EMULSIFIER BLENDS"/CT OR "EMULSIFIER E"/CT OR "EMULSIFIER  
FREE"/CT OR "EMULSIFIER FREE FAT EMULSIONS"/CT OR "EMULSIFIER  
MACHINE"/CT OR "EMULSIFIER MONOLAYERS"/CT OR "EMULSIFIER  
PREPARATIONS"/CT OR "EMULSIFIER PREPARATIONS # STORED"/CT OR  
"EMULSIFIER YN"/CT OR EMULSIFIER-BASED/CT OR "EMULSIFIER-SOLVEN  
T # COMPOSITION"/CT OR "EMULSIFIER-SOLVENT COMPOSITION"/CT OR  
"EMULSIFIER-STARCH-SPICE # READY-TO-EAT"/CT OR "EMULSIFIER.  
PATENT"/CT OR EMULSIFIERS/CT OR "EMULSIFIERS FOR FOODS"/CT OR  
"EMULSIFIERS PROCESSING PLANTS"/CT OR "EMULSIFIERS USE IN ICE  
CREAM"/CT OR "EMULSIFIERS USE IN MARGARINE"/CT OR "EMULSIFIERS-  
CONTAINING MODEL"/CT OR "EMULSIFIERS-CORN # QUALITY"/CT OR  
"EMULSIFIERS-CUTTER AIDS QUALITY # CANNED"/CT OR EMULSIFIERS-EG  
GS/CT OR "EMULSIFIERS-FATS # RAPID-COOKING"/CT OR "EMULSIFIERS-  
GROUNDNUT # QUALITY"/CT OR EMULSIFIERS-HUMECTANTS/CT OR  
EMULSIFIERS-HYDRATED/CT OR "EMULSIFIERS-MODIFIED STARCH-GUAR  
GUM # QUALITY"/CT OR EMULSIFIERS-STABILIZATION/CT OR EMULSIFIER  
S-STABILIZERS/CT)  
L133 7 SEA ABB=ON PLU=ON L128 AND L132  
L134 23 SEA ABB=ON PLU=ON L131 AND L132  
L135 28 SEA ABB=ON PLU=ON L133 OR L134 OR L131

FILE 'HCA, FSTA, FROSTI, WPIX' ENTERED AT 12:09:43 ON 27 OCT 2004  
L136 109 DUP REM L68 L135 L100 L101 (3 DUPLICATES REMOVED)

FILE 'HCA' ENTERED AT 12:10:14 ON 27 OCT 2004

=> d 168 1-57 cbib abs hitind hitrn

L68 ANSWER 1 OF 57 HCA COPYRIGHT 2004 ACS on STN

139:337234 **Emulsifier compositions** containing  
**sorbitan** monoesters. Lin, Peter Yau Tak; Seiden, Paul; Gruber,  
David Cammiade; Sanders, Robert Alan (The Procter & Gamble Company, USA).  
U.S. Pat. Appl. Publ. US 2003203070 A1 20031030, 17 pp., Cont.-in-part of  
U.S. Ser. No. 965,113. (English). CODEN: USXXCO. APPLICATION: US  
2003-396916 20030325. PRIORITY: US 2000-PV235291 20000926; US  
2000-PV235290 20000926; US 2000-PV235449 20000926; US 2000-PV235298  
20000926; US 2000-PV235289 20000926; US 2001-965113 20010926; US  
2002-PV367622 20020326.

AB Described are **sorbitan**-containing **emulsifying** compns.  
comprising relatively high levels of **sorbitan** monoesters. Such  
compns. have numerous applications, including uses in cosmetics, hard  
surface cleaners, shampoos, hair conditioners, personal cleaning products,  
lotions, fabric softeners, pharmaceutical compns., ice creams, whip  
creams, other whipped toppings, confectioneries, frostings, breads, baked  
goods, sauces, salad dressings, snacks, and dehydrated starch ingredients.

IC ICM A21D002-14  
NCL 426025000

CC 17-6 (Food and Feed Chemistry)  
ST **sorbitan** monoester **emulsifier** food cosmetic drug  
cleaning agent  
IT **Monoglycerides**  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(C16-18; **emulsifier** compns. containing **sorbitan**  
monoesters)  
IT Solanum tuberosum  
(French fry; **emulsifier** compns. containing **sorbitan**  
monoesters)  
IT Sunflower oil  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(Nu-Sun Oil; **emulsifier** compns. containing **sorbitan**  
monoesters)  
IT Bakery products  
(cakes, mixes; **emulsifier** compns. containing **sorbitan**  
monoesters)  
IT Detergents  
(cleaning compns.; **emulsifier** compns. containing **sorbitan**  
monoesters)  
IT Hair preparations  
(conditioners; **emulsifier** compns. containing **sorbitan**  
monoesters)  
IT Solanum tuberosum  
(dehydrated products; **emulsifier** compns. containing  
**sorbitan** monoesters)  
IT Bakery products  
Bread  
Confectionery  
Cosmetics  
Deodorization  
Detergents  
Dough  
Drug delivery systems  
Drugs  
    **Emulsifying** agents  
Esterification  
Fabric softeners  
Flours and Meals  
Food  
Food functional properties  
Food texture  
Frozen desserts  
Ice cream  
Potato chips  
Salad dressings  
Sauces (condiments)  
Scouring agents  
Shampoos  
Solanum tuberosum  
Surfactants  
    (**emulsifier** compns. containing **sorbitan** monoesters)  
IT Bakery products  
    (frostings; **emulsifier** compns. containing **sorbitan**  
    monoesters)  
IT Dairy products  
    (frozen desserts; **emulsifier** compns. containing **sorbitan**  
    monoesters)

IT Syrups (sweetening agents)  
(high-fructose hydrolyzed starch, Isomerase 100; **emulsifier**  
compns. containing **sorbitan** monoesters)

IT Cosmetics  
(lotions; **emulsifier** compns. containing **sorbitan**  
monoesters)

IT Solanum tuberosum  
(mashed; **emulsifier** compns. containing **sorbitan**  
monoesters)

IT Dough  
(potato; **emulsifier** compns. containing **sorbitan**  
monoesters)

IT **Fatty acids**, biological studies  
RL: COS (Cosmetic use); FFD (Food or feed use); NUU (Other use,  
unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(saturated, **sorbitan esters**; **emulsifier**  
compns. containing **sorbitan** monoesters)

IT Food  
(snack; **emulsifier** compns. containing **sorbitan**  
monoesters)

IT Lecithins  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(soya; **emulsifier** compns. containing **sorbitan**  
monoesters)

IT Fats and Glyceridic oils, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(vegetable; **emulsifier** compns. containing **sorbitan**  
monoesters)

IT Cream substitutes  
(whipped; **emulsifier** compns. containing **sorbitan**  
monoesters)

IT Cream  
(whipping; **emulsifier** compns. containing **sorbitan**  
monoesters)

IT 9005-25-8, Starch, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(dehydrated compns.; **emulsifier** compns. containing  
**sorbitan** monoesters)

IT 1310-73-2, Sodium hydroxide, uses  
RL: CAT (Catalyst use); USES (Uses)  
(**emulsifier** compns. containing **sorbitan** monoesters)

IT 26266-57-9, **Sorbitan** palmitate  
RL: COS (Cosmetic use); FFD (Food or feed use); NUU (Other use,  
unclassified); PEP (Physical, engineering or chemical process); PYP  
(Physical process); THU (Therapeutic use); BIOL (Biological study); PROC  
(Process); USES (Uses)  
(**emulsifier** compns. containing **sorbitan** monoesters)

IT 652-67-5D, Isosorbide, saturated **fatty acid esters**  
12441-09-7, **Sorbitan** 12441-09-7D, **Sorbitan**, saturated  
**fatty acid esters** 37318-79-9,  
**Sorbitan** oleate 56451-84-4, **Sorbitan** stearate  
93907-64-3, **Sorbitan** linoleate  
RL: COS (Cosmetic use); FFD (Food or feed use); NUU (Other use,  
unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(**emulsifier** compns. containing **sorbitan**  
monoesters)

IT 57-55-6D, Propylene glycol, monoesters 1338-43-8, Span 80  
121854-29-3, Olean 155215-70-6, Panodan 205 617692-79-2, Aldo DO

617693-00-2, 2,3-1-0

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**emulsifier** compns. containing **sorbitan** monoesters)

IT 50-70-4, Sorbitol, reactions 112-80-1, Oleic acid, reactions 143-19-1, Sodium oleate 26855-43-6, Paniplus 504

RL: RCT (Reactant); RACT (Reactant or reagent)  
(**emulsifier** compns. containing **sorbitan** monoesters)

IT 56451-84-4, Sorbitan stearate

RL: COS (Cosmetic use); FFD (Food or feed use); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(**emulsifier** compns. containing **sorbitan** monoesters)

IT 1338-43-8, Span 80

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**emulsifier** compns. containing **sorbitan** monoesters)

IT 50-70-4, Sorbitol, reactions 112-80-1, Oleic acid, reactions 143-19-1, Sodium oleate

RL: RCT (Reactant); RACT (Reactant or reagent)  
(**emulsifier** compns. containing **sorbitan** monoesters)

L68 ANSWER 2 OF 57 HCA COPYRIGHT 2004 ACS on STN

139:90461 Pharmaceutical **compositions** of modafinil compounds.

Jacobs, Martin J.; McIntyre, Bradley T.; Parikh, Alpa; Patel, Piyush R. (USA). U.S. Pat. Appl. Publ. US 2003125391 A1 20030703, 9 pp., Cont.-in-part of U.S. Ser. No. 974,473. (English): CODEN: USXXCO. APPLICATION: US 2002-286573 20021101. PRIORITY: US 2000-PV239488 20001011; US 2001-974473 20011010.

AB Pharmaceutical compns. of modafinil compds., i.e., modafinil, its racemic mixts., individual isomers, acid addition salts, polymorphs, analogs, etc., and their use in the treatment of nervous system disorders are described. The compns., providing a modafinil compound's blood serum level of about 0.05-30 g/mL in a subject, include non-aqueous compns. in organic solvents and compns. in solid **dispersions**. For example, a mixture of 95 mL of PEG-400 and 5 mL of benzyl alc. was stirred at room temperature until homogeneous. To a sep. container, 0.1 g of modafinil was weighed and 1 mL of the mixed solvent was added with stirring and heating to 55-60°. The solution was allowed to cool to room temperature and any undissolved solid

was

removed by filtration. In the case of a viscous solution or a solution that solidifies at room temperature, warming until a freely flowing solution was obtained and then filtration gave a solution free of particulate matter. The solubility of modafinil was 61 mg/mL, as measured by HPLC.

IC ICM A61K031-165

NCL 514618000

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1

ST modafinil soln solid **dispersion** nervous system disorder

IT Nervous system, disease

(central; modafinil solns. and solid **dispersions** for treatment of nervous system disorders)

IT Surfactants

(modafinil solns. and solid **dispersions** for treatment of nervous system disorders)

IT Lecithins

Polyoxyalkylenes, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

- (modafinil solns. and solid **dispersions** for treatment of nervous system disorders)
- IT Drug delivery systems  
(solid **dispersions**; modafinil solns. and solid **dispersions** for treatment of nervous system disorders)
- IT Drug delivery systems  
(solns.; modafinil solns. and solid **dispersions** for treatment of nervous system disorders)
- IT 68693-11-8, Modafinil  
RL: PKT (Pharmacokinetics); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(modafinil solns. and solid **dispersions** for treatment of nervous system disorders)
- IT **56-81-5D, Glycerol, esters**, polyglycolized  
63-42-3, Lactose 100-51-6, Benzyl alcohol, biological studies 151-21-3, Sodium dodecyl sulfate, biological studies 9003-39-8, Polyvinylpyrrolidone 9004-54-0, Dextran, biological studies 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 10182-91-9, Dodecyltrimethylammonium 12441-09-7D, **Sorbitan, fatty acid esters**, ethoxylated 25322-68-3, Polyethylene glycol 106392-12-5, Ethylene oxide-propylene oxide block copolymer  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(modafinil solns. and solid **dispersions** for treatment of nervous system disorders)
- IT **56-81-5D, Glycerol, esters**, polyglycolized  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(modafinil solns. and solid **dispersions** for treatment of nervous system disorders)
- L68 ANSWER 3 OF 57 HCA COPYRIGHT 2004 ACS on STN
- 138:1668 Purification and characterization of an autoclavable superoxide dismutase (SOD) isozyme from *Potentilla atrosanguinea*, and use of the SOD in cosmetic, food and pharmaceutical **compositions**. Kumar, Sanjay; Sahoo, Rashmita; Ahuja, Paramvir Singh (Council of Scientific & Industrial Research (CSIR), India). U.S. US 6485950 B1 20021126, 30 pp. (English). CODEN: USXXAM. APPLICATION: US 2000-617118 20000714.
- AB The invention relates to a novel purified isoenzyme of an autoclavable superoxide dismutase extracted from the plant *Potentilla atrosanguinea* Lodd. variety *argyrophylla*. The superoxide dismutase has the following characteristics: O<sub>2</sub>-scavenging activity remains same before and after autoclaving; scavenges O<sub>2</sub>- from sub-zero temperature of -20° C. to high temperature of +80°.; O<sub>2</sub>- scavenging activity at 25° for 30 days without adding any stabilizing agent such as polyols or sugars; O<sub>2</sub>- scavenging activity in the presence of saline (0.9% sodium chloride) to 61.8% of the control (without 0.9% sodium chloride), stable at 4° for at least 8 mo; contamination free and infection free from any living micro- and/or macro-organism after autoclaving. The enzyme possesses temperature optima at 0°; possesses a mol. weight of 33 kD under non-denaturing conditions; possesses a mol. weight of 36 kD under denaturing conditions; has clear peaks in UV range at 268 and 275 nm; has an enzyme turnover number of 19.53±104 per nmol per min at 0°; and requires Cu/Zn as a co-factor. The invention also relates to a process for the extraction of the superoxide dismutase and its use in preparing cosmetic, pharmaceutical and food compns. The method for the preparation of the purified isoenzyme of autoclavable superoxide dismutase and formulations containing the said autoclavable superoxide dismutase are disclosed.

IC ICM C12N009-02  
ICS C12N009-00; A61K038-44  
NCL 435189000; 435183000; 424094400  
CC 7-2 (Enzymes)  
Section cross-reference(s): 17, 62, 63  
IT **Monoglycerides**  
RL: COS (Cosmetic use); FFD (Food or feed use); THU (Therapeutic use);  
BIOL (Biological study); USES (Uses)  
(acetates, gums containing; purification and characterization of autoclavable superoxide dismutase (SOD) isoenzyme from *Potentilla atrosanguinea*, and use of SOD in cosmetic, food and pharmaceutical compns.)  
IT Amphiphiles  
Analgesics  
Anti-inflammatory agents  
Antibacterial agents  
Antibiotics  
Antimicrobial agents  
Antioxidants  
Beeswax  
Carriers  
Coloring materials  
**Emulsifying** agents  
Feed additives  
Flavoring materials  
Hemostatics  
Perfumes  
Preservatives  
Radical scavengers  
Surfactants  
Vaccines  
(compns. containing; purification and characterization of autoclavable superoxide dismutase (SOD) isoenzyme from *Potentilla atrosanguinea*, and use of SOD in cosmetic, food and pharmaceutical compns.)  
IT Castor oil  
Coconut oil  
Corn oil  
Essential oils  
Fats and Glyceridic oils, biological studies  
**Fatty acids**, biological studies  
Glycerides, biological studies  
Hormones, animal, biological studies  
Hydrocarbon oils  
Melanins  
Olive oil  
Palm oil  
Paraffin oils  
Phosphatidylcholines, biological studies  
Phosphatidylethanolamines, biological studies  
Polyoxyalkylenes, biological studies  
Soybean oil  
Steroids, biological studies  
Sulfites  
Thiols (organic), biological studies  
Tocopherols  
Vitamins  
RL: COS (Cosmetic use); FFD (Food or feed use); THU (Therapeutic use);  
BIOL (Biological study); USES (Uses)



(compsns. containing; purification and characterization of autoclavable superoxide dismutase (SOD) isoenzyme from *Potentilla atrosanguinea*, and use of SOD in cosmetic, food and pharmaceutical compsns.)

IT Drug delivery systems  
(**emulsions**; purification and characterization of autoclavable superoxide dismutase (SOD) isoenzyme from *Potentilla atrosanguinea*, and use of SOD in cosmetic, food and pharmaceutical compsns.)

IT **Fatty acids**, biological studies  
RL: COS (Cosmetic use); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(lanolin, compsns. containing; purification and characterization of autoclavable superoxide dismutase (SOD) isoenzyme from *Potentilla atrosanguinea*, and use of SOD in cosmetic, food and pharmaceutical compsns.)

IT Drug delivery systems  
(**suspensions**; purification and characterization of autoclavable superoxide dismutase (SOD) isoenzyme from *Potentilla atrosanguinea*, and use of SOD in cosmetic, food and pharmaceutical compsns.)

IT Drug delivery systems  
(vesicular **dispersions**; purification and characterization of autoclavable superoxide dismutase (SOD) isoenzyme from *Potentilla atrosanguinea*, and use of SOD in cosmetic, food and pharmaceutical compsns.)

IT **50-70-4D**, Sorbitol, **esters** 50-81-7, Vitamin C, biological studies 52-90-4, L-Cysteine, biological studies 57-10-3, Palmitic acid, biological studies 57-10-3D, Palmitic acid, glycerides 57-11-4, Stearic acid, biological studies 57-41-0, Phenytoin 57-50-1, Sucrose, biological studies 57-55-6, Propylene glycol, biological studies 58-08-2, Caffeine, biological studies 58-95-7, Tocopherol acetate 59-02-9,  $\alpha$ -Tocopherol 60-33-3, Linoleic acid, biological studies 60-33-3D, Linoleic acid, glycerides 62-53-3, Aniline, biological studies 63-42-3, Lactose 63-68-3, L-Methionine, biological studies 64-17-5, Ethanol, biological studies 67-56-1, Methanol, biological studies 67-63-0, Isopropanol, biological studies 69-93-2, Uric acid, biological studies 70-18-8, Reduced glutathione, biological studies 71-23-8, Propanol, biological studies 71-36-3, Butanol, biological studies 74-79-3, L-Arginine, biological studies 77-09-8, Phenolphthalein 87-99-0, Xylitol 90-05-1, Guaiacol 106-69-4, 1,2,6-Hexanetriol 107-21-1, Ethylene glycol, biological studies 107-35-7, Taurine 108-95-2, Phenol, biological studies 110-27-0, Isopropyl myristate 110-36-1, Butyl myristate 112-53-8, Lauryl alcohol 112-72-1, Myristyl alcohol **112-80-1**, Oleic acid, biological studies **112-80-1D**, Oleic acid, glycerides 112-85-6, Behenic acid 112-86-7, Erucic acid 112-92-5, Stearyl alcohol 122-99-6, Phenoxyethanol 124-07-2D, Caprylic acid, glycerides 124-07-2D, Octanoic acid, hydroxylated polyisobutenyl derivs. 127-17-3, biological studies 127-82-2, Zinc phenol sulfonate 128-44-9, Sodium saccharinate 141-22-0, Ricinoleic acid 142-91-6, Isopropyl palmitate 143-07-7, Lauric acid, biological studies 143-07-7D, Lauric acid, glycerides 143-28-2, Oleyl alcohol 302-04-5, Thiocyanate, biological studies 334-48-5D, Capric acid, glycerides 364-98-7, Diazoxide 404-86-4, Capsaicin 463-40-1, Linolenic acid 463-40-1D, Linolenic acid, glycerides 506-30-9, Arachidic acid 526-84-1, Dihydroxymaleic acid 527-60-6, Mesitol 538-23-8, Octanoic acid triglyceride 540-11-4, Ricinoleyl alcohol 544-63-8, Myristic acid, biological studies 544-63-8D, Myristic acid, alkyl esters 544-63-8D, Myristic acid, glycerides 546-46-3, Zinc citrate 553-72-0, Zinc benzoate 557-34-6, Zinc acetate 585-86-4, Lactitol 616-91-1, N-Acetyl-L-cysteine

621-71-6 628-97-7, Ethyl palmitate 629-98-1, Erucyl alcohol  
661-19-8, Behenyl alcohol 1300-26-1, Zinc glycerophosphate 1314-13-2,  
Zinc oxide, biological studies 1314-22-3, Zinc peroxide 1330-70-7,  
Hydroxystearic acid 1332-07-6, Zinc borate 1406-18-4, Vitamin E  
1464-42-2, Selenomethionine 2599-01-1, Cetyl myristate 2724-58-5,  
Isostearic acid 2814-60-0 3068-00-6, 1,2,4-Butanetriol 3460-37-5,  
Hexyl stearate 3486-35-9, Zinc carbonate 3614-08-2, Selenocysteine  
4345-03-3 4468-02-4, Zinc gluconate 5333-42-6, 2-Octyl-dodecanol  
7235-40-7,  $\beta$ -Carotene 7631-86-9, Silica, biological studies  
7646-85-7, Zinc chloride, biological studies 7681-49-4, Sodium fluoride,  
biological studies 7699-45-8, Zinc bromide 7733-02-0, Zinc sulfate  
7779-88-6, Zinc nitrate 7782-49-2, Selenium, biological studies  
9001-48-3, Glutathione reductase 9003-20-7, Polyvinyl acetate  
9003-99-0, Peroxidase 9004-61-9, Hyaluronic acid 9005-00-9, Steareth-2  
9005-63-4D, Polyoxyethylenesorbitan, **fatty acid**  
**esters** 9007-43-6, Cytochrome c, biological studies 9013-66-5,  
Glutathione peroxidase 10191-41-0, DL- $\alpha$ -Tocopherol 10401-55-5,  
Cetyl ricinoleate 11103-57-4, Vitamin A 11126-29-7, Zinc silicate  
12441-09-7D, **Sorbitan, fatty acid**  
**esters** 12651-25-1, Zinc titanate 13463-41-7, Zinc pyrithione  
13826-88-5, Zinc tetrafluoroborate 14281-83-5, Zinc glycinate  
16283-36-6, Zinc salicylate 16871-71-9, Zinc hexafluorosilicate  
16887-00-6, Chloride, biological studies 16984-48-8, Fluoride,  
biological studies 18312-31-7, Stearyl octanoate 20461-54-5, Iodide,  
biological studies 24959-67-9, Bromide, biological studies 25231-21-4,  
Polypropylene glycol stearyl ether 25265-75-2, Butylene glycol  
25322-68-3, Polyethylene glycol 25322-69-4, Polypropylene glycol  
25618-55-7D, Polyglycerin, **fatty acid esters**  
26281-43-6, 3,5-Dichloro-2-hydroxybenzenesulfonic acid 27458-93-1,  
Isostearyl alcohol 32797-18-5, 1,3-Butadien-1-ol 36653-82-4, Hexadecyl  
alcohol 38304-91-5, Minoxidil 39467-17-9, Zinc stannate 51744-92-4,  
 $\alpha$ -Tocopheryl linoleate 52225-20-4 52296-98-7, Octadecanediol  
71276-50-1,  $\alpha$ -Tocopherol phosphate 77752-14-8, Purcellin oil  
476494-41-4

RL: COS (Cosmetic use); FFD (Food or feed use); THU (Therapeutic use);  
BIOL (Biological study); USES (Uses)

(compsns. containing; purification and characterization of autoclavable  
superoxide dismutase (SOD) isoenzyme from *Potentilla atrosanguinea*, and  
use of SOD in cosmetic, food and pharmaceutical compsns.)

IT 50-70-4D, Sorbitol, **esters** 112-80-1, Oleic

acid, biological studies 112-80-1D, Oleic acid, glycerides

RL: COS (Cosmetic use); FFD (Food or feed use); THU (Therapeutic use);

BIOL (Biological study); USES (Uses)

(compsns. containing; purification and characterization of autoclavable  
superoxide dismutase (SOD) isoenzyme from *Potentilla atrosanguinea*, and  
use of SOD in cosmetic, food and pharmaceutical compsns.)

L68 ANSWER 4 OF 57 HCA COPYRIGHT 2004 ACS on STN

137:19759 Pourable fat-based **emulsified** frying **composition**

. Fabian, Juergen Heinz; Sein, Arjen; Verheij, Jan Adranus; Williams,  
Andrea (Unilever N.V., Neth.; Unilever PLC; Hindustan Lever Ltd.). PCT  
Int. Appl. WO 2002045519 A1 20020613, 27 pp. DESIGNATED STATES: W: AE,  
AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,  
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,  
MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,  
TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,  
RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI,

FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR.  
(English). CODEN: PIXXD2. APPLICATION: WO 2001-EP13310 20011114.  
PRIORITY: EP 2000-310907 20001207.

- AB Water continuous, pourable compns. comprising >50-80 wt% fat, an **emulsifier** having a hydrophilic/lipophilic balance value of at least 7, an antispattering composition and optionally a biopolymer in an amount of ≤0.3 wt% on total composition weight are suitable frying compns.
- IC ICM A23D007-00  
ICS A23D007-02
- CC 17-9 (Food and Feed Chemistry)
- ST frying compn pourable fat **emulsion**
- IT Food functional properties  
(antispattering; pourable fat-based **emulsified** frying composition)
- IT Diglycerides  
**Monoglycerides**  
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); BIOL (Biological study); PROC (Process);  
USES (Uses)  
(diacetyltartaric acid esters; pourable fat-based **emulsified** frying composition)
- IT Cooking  
(frying; pourable fat-based **emulsified** frying composition)
- IT Diglycerides  
**Monoglycerides**  
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); BIOL (Biological study); PROC (Process);  
USES (Uses)  
(mixed **monoglycerides** and diglycerides, esters with diacetyltartaric acid; pourable fat-based **emulsified** frying composition)
- IT **Emulsifying** agents  
Food **emulsions**  
Hydrophile-lipophile balance value  
(pourable fat-based **emulsified** frying composition)
- IT Biopolymers  
Fats and Glyceridic oils, biological studies  
Lecithins  
Sunflower oil  
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); BIOL (Biological study); PROC (Process);  
USES (Uses)  
(pourable fat-based **emulsified** frying composition)
- IT 25618-55-7D, **Polyglycerol, esters**  
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); BIOL (Biological study); PROC (Process);  
USES (Uses)  
(Triodan; pourable fat-based **emulsified** frying composition)
- IT 7647-14-5, Sodium chloride, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(pourable fat-based **emulsified** frying composition)
- IT 50-21-5D, Lactic acid, glyceride esters 57-50-1D, Sucrose, esters  
77-92-9D, Citric acid, glyceride esters 110-15-6D, Succinic acid, glyceride esters 9000-30-0, Guar gum 9000-69-5D, Pectin, acetylated 9005-63-4D, Polyoxyethylene **sorbitan, fatty acid esters** 9005-67-8, Tween 60 11138-66-2, Xanthan gum 24634-61-5, Potassium sorbate 25383-99-7, Sodium stearoyl lactylate 182176-97-2, Admul **Datem** 1935 225111-87-5, Grindsted Citrem N 12

RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); BIOL (Biological study); PROC (Process); USES (Uses)

(pourable fat-based **emulsified** frying composition)

L68 ANSWER 5 OF 57 HCA COPYRIGHT 2004 ACS on STN

137:5449 Acidic oil-in-water type **emulsion composition**.

Shiiba, Daisuke; Asou, Yoshihide; Kawai, Shigeru; Nakajima, Yoshinobu (Kao Corporation, Japan). Eur. Pat. Appl. EP 1214886 A1 20020619, 15 pp.

DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR. (English). CODEN: EPXXDW. APPLICATION: EP 2001-129299 20011213. PRIORITY: JP 2000-381596 20001215.

AB The invention provides an acidic oil-in-water type **emulsion** composition which has an oil phase containing at least 20 % by weight of diacylglycerol and 0.5 to 5.0 % by weight of a crystallization inhibitor, and has

excellent shelf stability at low temps. though it contains diacylglycerol at a high concentration, also good in appearance and flavor and useful as a diet

or food for improving lipid metabolism

IC ICM A23D007-00

ICS A61K007-48; A23L001-24; A61K047-14

CC 17-6 (Food and Feed Chemistry)

ST acid **emulsion** health food

IT Health food

(acidic oil-in-water type **emulsion** composition for food)

IT **Fatty acids**, biological studies

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(**esters**; acidic oil-in-water type food **emulsion** containing)

IT Crystallization

(inhibitors; acidic oil-in-water type food **emulsion** containing)

IT **Emulsions**

(oil-in-water; acidic oil-in-water type **emulsion** composition for food)

IT 56-81-5D, Glycerol, diacyl derivs.

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(acidic oil-in-water type **emulsion** containing)

IT 57-50-1D, Sucrose, **esters** with **fatty acids**

12441-09-7D, **Sorbitan**, **esters** with **fatty**

**acids** 25618-55-7D, **Polyglycerol**, **esters** with

**fatty acids**

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(**acidic** oil-in-water type food **emulsion** containing)

L68 ANSWER 6 OF 57 HCA COPYRIGHT 2004 ACS on STN

136:262338 Method for **dispersing** plant sterol for beverage and a

plant sterol-**dispersed** beverage, of which particle size is

nanometer-scale in **dispersed** beverage. Yoon, Won-Tae; Kim,

Kab-Sig; Kim, Bo-Chun; Han, Jung-Hee; Hong, Hyung-Pyo (Eugene Science Inc., S. Korea). PCT Int. Appl. WO 2002028204 A1 20020411, 34 pp.

DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH,

CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-KR1640 20010928. PRIORITY: KR 2000-57652 20000930.

- AB Disclosed are a method for **dispersing** plant sterol for beverage and a plant sterol-**dispersed** beverage, of which particle size is nanometer-scale in **dispersed** beverage. The **dispersion** of plant sterols starts with the **admixing** of plant sterol to at least one **emulsifier** selected from the group consisting of sucrose fatty acid ester, sorbitan fatty acid ester and polyglycerin fatty acid ester, followed by melting the admixt. by heating at 60 to 200°C. Afterwards, the molten substance is mixed with an aqueous beverage alone or an **emulsifier**-containing aqueous beverage. This resulting mixture is stirred at a high speed to give a **dispersion** of plant sterols in an aqueous beverage. The beverage is superior in bioavailability, having good mouth feel, transparent aspect and no influence on the characteristic taste, flavor and color of the beverage.
- IC ICM A23L002-38
- CC 17-13 (Food and Feed Chemistry)  
Section cross-reference(s): 63
- ST beverage **dispersing** agent phytosterol; sterol plant beverage **dispersing** agent anticholesteremic
- IT Tea products  
(beverages, green; method for **dispersing** plant sterol for beverage and a plant sterol-**dispersed** beverage, of which particle size is nanometer-scale in **dispersed** beverage)
- IT Coffee products  
(beverages; method for **dispersing** plant sterol for beverage and a plant sterol-**dispersed** beverage, of which particle size is nanometer-scale in **dispersed** beverage)
- IT Beverages  
(carbonated; method for **dispersing** plant sterol for beverage and a plant sterol-**dispersed** beverage, of which particle size is nanometer-scale in **dispersed** beverage)
- IT Lipoproteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(cholesterol; method for **dispersing** plant sterol for beverage and a plant sterol-**dispersed** beverage, of which particle size is nanometer-scale in **dispersed** beverage)
- IT Beverages  
(fruit drinks; method for **dispersing** plant sterol for beverage and a plant sterol-**dispersed** beverage, of which particle size is nanometer-scale in **dispersed** beverage)
- IT Beverages  
(grain-based; method for **dispersing** plant sterol for beverage and a plant sterol-**dispersed** beverage, of which particle size is nanometer-scale in **dispersed** beverage)
- IT Beverages  
(health; method for **dispersing** plant sterol for beverage and a plant sterol-**dispersed** beverage, of which particle size is nanometer-scale in **dispersed** beverage)
- IT Temperature effects, biological  
(heat; method for **dispersing** plant sterol for beverage and a plant sterol-**dispersed** beverage, of which particle size is nanometer-scale in **dispersed** beverage)
- IT Lipoproteins

- RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(low-d., cholesterol; method for **dispersing** plant sterol for  
beverage and a plant sterol-**dispersed** beverage, of which  
particle size is nanometer-scale in **dispersed** beverage)
- IT Alcoholic beverages  
Anticholesteremic agents  
Beverages  
    **Dispersing** agents  
    **Dispersion** (of materials)  
Drinking waters  
Drying  
    **Emulsifying** agents  
Food additives  
Food functional properties  
Freeze drying  
Fruit and vegetable juices  
Homogenization  
Hydrophile-lipophile balance value  
Milk  
Orange juice  
Sonication  
    (method for **dispersing** plant sterol for beverage and a plant  
    sterol-**dispersed** beverage, of which particle size is  
    nanometer-scale in **dispersed** beverage)
- IT Sterols  
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical  
process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological  
study); PROC (Process); USES (Uses)  
    (phyto-; method for **dispersing** plant sterol for beverage and  
    a plant sterol-**dispersed** beverage, of which particle size is  
    nanometer-scale in **dispersed** beverage)
- IT Glycine max  
    (soybean milk; method for **dispersing** plant sterol for  
    beverage and a plant sterol-**dispersed** beverage, of which  
    particle size is nanometer-scale in **dispersed** beverage)
- IT Drying  
    (spray; method for **dispersing** plant sterol for beverage and a  
    plant sterol-**dispersed** beverage, of which particle size is  
    nanometer-scale in **dispersed** beverage)
- IT Mixing  
    (stirring; method for **dispersing** plant sterol for beverage  
    and a plant sterol-**dispersed** beverage, of which particle size  
    is nanometer-scale in **dispersed** beverage)
- IT 57-88-5, Cholesterol, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
    (blood and lipoprotein; method for **dispersing** plant sterol  
    for beverage and a plant sterol-**dispersed** beverage, of which  
    particle size is nanometer-scale in **dispersed** beverage)
- IT 57-50-1D, Sucrose, **fatty acid esters**  
83-45-4, Sitostanol 83-46-5 83-48-7, Stigmasterol 474-60-2,  
Campestanol 474-62-4, Campesterol 1337-30-0, **Sorbitan**  
laurate 12441-09-7D, **Sorbitan, fatty acid**  
**esters** 25618-55-7D, **Polyglycerol, fatty**  
**acid esters** 37318-31-3, Sucrose stearate 37349-34-1,  
Polyglycerol monostearate  
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical  
process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological  
study); PROC (Process); USES (Uses)

(method for **dispersing** plant sterol for beverage and a plant sterol-**dispersed** beverage, of which particle size is nanometer-scale in **dispersed** beverage)

L68 ANSWER 7 OF 57 HCA COPYRIGHT 2004 ACS on STN

134:339855 **Compositions** comprising edible oils or fats and phytosterols and/or phytostanols substantially dissolved therein, method of making the same, and use thereof in treating or preventing cardiovascular disease and its underlying conditions. Zawistowski, Jerzy (Forbes Medi-Tech Inc., Can.). PCT Int. Appl. WO 2001032029 A2 20010510, 22 pp. DESIGNATED STATES: W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2000-CA1298 20001103. PRIORITY: US 1999-434356 19991103.

AB A composition comprises an edible oil or fat and one or more phytosterols and/or phytostanols, wherein the phytosterols and/or phytostanols are substantially completely dissolved therein by a method in which the phytosterols and/or phytostanols are heated to form a molten material which is then added to a heated oil or fat and the composition so formed is cooled to room temperature

IC ICM A23D

CC 17-9 (Food and Feed Chemistry)  
Section cross-reference(s): 18, 63

IT Anticholesteremic agents

Atherosclerosis

Beverages

Bread

Drugs

**Emulsifying agents**

Hypercholesterolemia

Surfactants

(compsns. comprising edible oils or fats with dissolved phytosterols and/or phytostanols, and their manufacture and use in treating or preventing atherosclerosis)

IT **Fatty acids**, biological studies

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(**esters**, polyoxyethylated; compsns. comprising edible oils or fats with dissolved phytosterols and/or phytostanols, and their manufacture and use in treating or preventing atherosclerosis)

IT Carboxylic acids, biological studies

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(**glycerol fatty acid esters**;

compsns. comprising edible oils or fats with dissolved phytosterols and/or phytostanols, and their manufacture and use in treating or preventing atherosclerosis)

IT **Fatty acids**, biological studies

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(saturated; compsns. comprising edible oils or fats with dissolved phytosterols and/or phytostanols, and their manufacture and use in treating or preventing atherosclerosis)

IT 56-81-5D, **Glycerol, fatty acid**

**esters** 57-50-1D, Sucrose, **fatty acid**  
**esters** 57-55-6D, Propylene glycol, **fatty acid**  
**esters** 57-88-5, Cholest-5-en-3-ol (3 $\beta$ )-, biological studies  
83-45-4, Sitostanol 83-46-5 83-47-6, Clionasterol 83-48-7,  
Stigmasterol 102-71-6D, Triethanolamine, difatty alkyl, biological  
studies 107-43-7D, Betaine, alkyl derivs. 110-15-6D, Succinic acid,  
sulfo salts 313-04-2, Desmosterol 474-60-2, Campestanol 474-62-4,  
Campesterol 474-63-5, Chalinasterol 474-67-9, Brassicasterol  
481-16-3, Poriferasterol 9005-71-4, Tween 65 9016-45-9 9036-19-5,  
Octylphenoxy-polyethoxyethanol 11138-66-2, Xanthan gum 12441-09-7D,  
**Sorbitan, esters** 12441-09-7D, **Sorbitan, fatty**  
**acid esters** 25322-68-3, Polyethylene glycol  
25322-69-4D, Polypropylene glycol, alkyl and polyethyleneoxy derivs.  
25618-55-7, Polyglycerol 26636-37-3 34344-66-6, Polysorbic acid  
36422-25-0, Brassicastanol 55529-51-6, Poriferastanol 59113-36-9D,  
Diglycerol, **fatty acid esters**  
106392-12-5D, Poloxamer, derivs. 252055-09-7, Phytrol  
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological  
study); USES (Uses)  
(compsn. comprising edible oils or fats with dissolved phytosterols  
and/or phytostanols, and their manufacture and use in treating or preventing  
atherosclerosis)

IT **56-81-5D, Glycerol, fatty acid**  
**esters**  
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological  
study); USES (Uses)  
(compsn. comprising edible oils or fats with dissolved phytosterols  
and/or phytostanols, and their manufacture and use in treating or preventing  
atherosclerosis)

L68 ANSWER 8 OF 57 HCA COPYRIGHT 2004 ACS on STN

134:105846 Clear aqueous **dispersions** of triglycerides and  
surfactants for delivery of drugs and nutrients. Chen, Feng-Jing; Patel,  
Mahesh V. (Lipocine, Inc., USA). PCT Int. Appl. WO 2001001960 A1  
20010111, 103 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA,  
BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB,  
GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,  
LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,  
RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA,  
ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH,  
CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE,  
NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO  
2000-US15133 20000602. PRIORITY: US 1999-345615 19990630.

AB The present invention relates to drug and nutrient delivery systems, and  
in particular to pharmaceutical compns. and methods for improved  
solubilization of triglycerides and improved delivery of therapeutic  
agents. Compns. of the present invention include a triglyceride and a  
carrier, where the carrier is formed from a combination of at least two  
surfactants, at least one of which is hydrophilic. Upon dilution with an  
aqueous  
solvent, the composition forms a clear, aqueous **dispersion** of the  
triglyceride and surfactants. An optional therapeutic agent can be  
incorporated into the composition, or can be co-administered with the  
composition  
The invention also provides methods of enhancing triglyceride solubility and  
methods of treatment with therapeutic agents using these compns. Several  
formulations were presented of compns. that can be prepared according to the  
present invention using a variety of therapeutic agents. Examples of aqueous



**dispersions** include: (1) Cremophor RH-40 0.75, Peceol 0.25, corn oil 0.40, and fenofibrate 0.10; (2) Cremophor RH-40 0.57, Crovol M-40 0.43, corn oil 0.40, and Rofecoxib 0.15; (3) Tween 80 0.70, Tween 85 0.35, Miglyol 812 0.30, Paclitaxel 0.10, and **PEG** 400 0.25; or (4) Kessco **PEG** 400 MO 0.33, corn oil 0.30, and Terbinafine 0.25 parts, resp.

IC ICM A61K009-08

ICS A61K009-10; A61K009-12; A61K009-14; A61K009-16; A61K009-20;  
A61K009-28; A61K009-48; A61K009-66

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 18

ST glyceride surfactant **dispersion** drug nutrient delivery system

IT **Monoglycerides**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(C6-22, acetylated; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Diglycerides

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(C6-22; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Glycerides, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(C8-10, ethoxylated; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Glycerides, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(C8-10; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Glycerides, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(C8-12, Captec 350; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Amino acids, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(N-fatty acyl; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT **Monoglycerides**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(acetates; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Drug delivery systems

(aerosols; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Phenols, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(alkyl, ethoxylated; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Glycosides

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(alkyl; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Fats and Glyceridic oils, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(almond; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Fats and Glyceridic oils, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(animal; clear aqueous **dispersions** of triglyceride and

surfactants for delivery of drugs and nutrients)

IT Beverages  
(aqueous; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Fats and Glyceridic oils, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(babassu; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(beads; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Decomposition  
(biodegrdn., enzymic, prevention of; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Fats and Glyceridic oils, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(borage seed; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(capsules; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Gelatins, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(capsules; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Antifoaming agents  
Binders  
Buffers  
Chelating agents  
Coloring materials  
Compression  
Cosmetics  
Encapsulation  
Flavoring materials  
Freeze drying  
Granulation  
Homogenization  
Hydrophile-lipophile balance value  
Melting  
Mixing  
Molding  
Nutrients  
Odor and Odorous substances  
Opacifiers  
Peptidomimetics  
Plasticizers  
Preservatives  
Size reduction  
Solubilization  
Solubilizers  
Sonication  
Spraying  
Surfactants  
(clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Alcohols, biological studies  
Amides, biological studies  
Bile salts

Canola oil  
Castor oil  
Coconut oil  
Corn oil  
Cottonseed oil  
DNA  
Diglycerides  
Esters, biological studies  
Glycerides, biological studies  
Lecithins  
Lysophosphatidic acids  
Lysophosphatidylcholines  
Lysophosphatidylethanolamines  
Lysophosphatidylserines  
Lysophospholipids  
    **Monoglycerides**  
Oligodeoxyribonucleotides  
Oligonucleotides  
Olive oil  
Palm kernel oil  
Palm oil  
Peanut oil  
Peptides, biological studies  
Phosphatidic acids  
Phosphatidylcholines, biological studies  
Phosphatidylethanolamines, biological studies  
Phosphatidylglycerols  
Phosphatidylserines  
Phospholipids, biological studies  
Polyoxyalkylenes, biological studies  
Proteins, general, biological studies  
Quaternary ammonium compounds, biological studies  
RNA  
Rape oil  
Safflower oil  
Soybean oil  
Sterols  
Sunflower oil  
Vitamins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(clear aqueous **dispersions** of triglyceride and surfactants for  
delivery of drugs and nutrients)

IT Glycerides, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(coco, Pureco 76; clear aqueous **dispersions** of triglyceride and  
surfactants for delivery of drugs and nutrients)

IT Glycerides, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(corn, ethoxylated; clear aqueous **dispersions** of triglyceride and  
surfactants for delivery of drugs and nutrients)

IT Fats and Glyceridic oils, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(currant, Ribes nigrum seed; clear aqueous **dispersions** of  
triglyceride and surfactants for delivery of drugs and nutrients)

IT Tackifiers

(detackifiers; clear aqueous **dispersions** of triglyceride and  
surfactants for delivery of drugs and nutrients)

IT Bath preparations

(douches; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(drops; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(elixirs; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(**emulsions**; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT **Fatty acids**, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(**esters**, salts; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Polyoxyalkylenes, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(**esters**; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Castor oil  
Corn oil  
**Fatty acids**, biological studies  
Sterols  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(ethoxylated; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Fats and Glyceridic oils, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(evening primrose; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Fats and Glyceridic oils, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(fish; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(gels; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(granules; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Fats and Glyceridic oils, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(grape seed; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Castor oil  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(hydrogenated, ethoxylated; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Castor oil  
Coconut oil  
Cottonseed oil  
Lecithins  
Palm oil  
Soybean oil  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(hydrogenated; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Enzymes, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(inhibitors; clear aqueous **dispersions** of triglyceride and  
surfactants for delivery of drugs and nutrients)

IT Surfactants  
(ionic; clear aqueous **dispersions** of triglyceride and surfactants  
for delivery of drugs and nutrients)

IT Drug delivery systems  
(liqs., **dispersions**; clear aqueous **dispersions** of  
triglyceride and surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(liqs.; clear aqueous **dispersions** of triglyceride and surfactants  
for delivery of drugs and nutrients)

IT Glycerides, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(long-chain; clear aqueous **dispersions** of triglyceride and  
surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(lotions; clear aqueous **dispersions** of triglyceride and  
surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(lozenges; clear aqueous **dispersions** of triglyceride and  
surfactants for delivery of drugs and nutrients)

IT Lysophosphatides  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(lysophosphatidylglycerols; clear aqueous **dispersions** of  
triglyceride and surfactants for delivery of drugs and nutrients)

IT Glycerides, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(medium-chain; clear aqueous **dispersions** of triglyceride and  
surfactants for delivery of drugs and nutrients)

IT Fats and Glyceridic oils, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(mustard; clear aqueous **dispersions** of triglyceride and  
surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(ointments, creams; clear aqueous **dispersions** of triglyceride and  
surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(ointments; clear aqueous **dispersions** of triglyceride and  
surfactants for delivery of drugs and nutrients)

IT Peptides, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(oligopeptides; clear aqueous **dispersions** of triglyceride and  
surfactants for delivery of drugs and nutrients)

IT Glycerides, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(palm kernel-oil, ethoxylated; clear aqueous **dispersions** of  
triglyceride and surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(pastes; clear aqueous **dispersions** of triglyceride and  
surfactants for delivery of drugs and nutrients)

IT Antioxidants  
(pharmaceutical; clear aqueous **dispersions** of triglyceride and  
surfactants for delivery of drugs and nutrients)

IT Alcohols, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(polyhydric; clear aqueous **dispersions** of triglyceride and  
surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(powders; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Phosphatidylethanolamines, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(reaction products, with polyvinylpyrrolidone; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Fats and Glyceridic oils, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(sesame; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Fats and Glyceridic oils, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(shark-liver oil; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(solids; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(solns.; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Sterols  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(soya, ethoxylated; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(sprays; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Carbohydrates, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(sugar esters; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Carbohydrates, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(sugar ethers; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Diet  
(supplements; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(suppositories, vaginal; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(suppositories; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(**suspensions**; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(syrups; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
(tablets; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Glycosides  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(thioglycosides, alkyl; clear aqueous **dispersions** of triglyceride

and surfactants for delivery of drugs and nutrients)

IT Fats and Glyceridic oils, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (vegetable, ethoxylated, hydrogenated; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Fats and Glyceridic oils, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (vegetable, hydrogenated; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Glycerides, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (vegetable-oil; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT Drug delivery systems  
 (wafers; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT 9005-25-8, Starch, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (capsules; clear aqueous **dispersions** of triglyceride and surfactants for delivery of drugs and nutrients)

IT 50-21-5D, Lactic acid, acyl esters **50-70-4D**, Sorbitol, **esters** 50-99-7D, D-Glucose, alkyl esters, biological studies 56-81-5, Glycerol, biological studies 57-10-3, Hexadecanoic acid, biological studies 57-11-4, Octadecanoic acid, biological studies 57-55-6, Propylene glycol, biological studies 57-55-6D, Propylene glycol, esters and ethers 57-83-0, Progesterone, biological studies 57-88-5, Cholesterol, biological studies 60-33-3, 9,12-Octadecadienoic acid (9Z,12Z)-, biological studies 64-17-5, Ethanol, biological studies 67-63-0, Isopropanol, biological studies 69-65-8, Mannitol 69-79-4D, Maltose, alkyl esters 71-36-3, Butanol, biological studies 77-89-4, Acetyl triethylcitrate 77-90-7, Acetyl tributyl citrate 77-92-9D, Citric acid, esters 77-93-0, Triethylcitrate 77-94-1, Tributylcitrate 81-24-3, Taurocholic acid 81-25-4, Cholic acid 83-44-3, Deoxycholic acid 87-69-4D, Tartaric acid, esters, biological studies 100-51-6, Benzyl alcohol, biological studies 102-76-1, Triacetin 105-37-3, Ethyl propionate 105-54-4, Ethyl butyrate 105-60-2,  $\epsilon$ -Caprolactam, biological studies 105-60-2D, Caprolactam, N-alkyl derivs. 106-32-1, Ethyl caprylate 107-21-1D, Ethylene glycol, esters 107-88-0, 1,3-Butanediol 110-15-6D, Succinic acid, esters 110-27-0, Isopropyl myristate 111-62-6, Ethyl oleate 111-90-0, Transcutol **112-80-1**, Oleic acid, biological studies 115-77-5, Pentaerythritol, biological studies 115-77-5D, Pentaerythritol, esters 115-83-3, Pentaerythrityl tetrastearate 118-71-8, Maltol 122-32-7, Glyceryl trioleate 124-07-2, Caprylic acid, biological studies 127-19-5, Dimethylacetamide 128-13-2, Ursodeoxycholic acid 141-22-0 142-62-1, Caproic acid, biological studies 142-91-6, Isopropyl palmitate 143-07-7, Lauric acid, biological studies 151-41-7, Lauryl sulfate 302-79-4, Retinoic acid 334-48-5, Capric acid 360-65-6, Glycodeoxycholic acid 434-13-9, Lithocholic acid 463-40-1 474-25-9, Chenodeoxycholic acid 475-31-0, Glycocholic acid 502-44-3,  $\epsilon$ -Caprolactone 516-35-8, Taurochenodeoxycholic acid 516-50-7, Taurodeoxycholic acid 537-40-6, Glyceryl trilinoleate 538-23-8, Glyceryl tricaprylate 538-24-9, Glyceryl trilaurate 541-15-1D, Carnitine, fatty esters, salts 542-28-9,  $\delta$ -Valerolactone 544-35-4, Ethyl linoleate 544-63-8, Myristic acid, biological studies 577-11-7, Sodium docusate 616-45-5, 2-Pyrrolidone 616-45-5D, Pyrrolidone, N-alkyl and N-hydroxyalkyl derivs. 621-70-5, Glyceryl tricaproate 621-71-6, Glyceryl tricaprinate 623-84-7, Propylene glycol diacetate 640-79-9, Glycochenodeoxycholic acid

675-20-7, 2-Piperidone 872-50-4, N-Methylpyrrolidone, biological studies  
1331-12-0, Propylene glycol monoacetate 1335-71-3, Propylene glycol  
oleate 1338-39-2, **Sorbitan** monolaurate 1338-41-6,  
**Sorbitan** monostearate **1338-43-8, Sorbitan**  
monooleate 1935-18-8, Palmitoyl carnitine 1972-08-3, Dronabinol  
2466-77-5, Lauroyl carnitine 2687-91-4, N-Ethylpyrrolidone 2687-94-7,  
N-Octylpyrrolidone 2687-96-9, N-Lauryl-2-pyrrolidone 3008-50-2,  
Pentaerythritol tetracaprylate 3068-88-0,  $\beta$ -Butyrolactone  
3445-11-2 5306-85-4, Dimethyl isosorbide 6990-06-3, Fusidic acid  
7664-93-9D, Sulfuric acid, alkyl esters, biological studies 8007-43-0,  
**Sorbitan** sesquioleate 9002-89-5, Polyvinylalcohol 9002-92-0,  
Polyethylene glycol lauryl ether 9002-96-4 9003-39-8,  
Polyvinylpyrrolidone 9003-39-8D, Polyvinylpyrrolidone, reaction products  
with phosphatidylethanolamine 9004-34-6D, Cellulose, ethers, biological  
studies 9004-57-3, Ethylcellulose 9004-65-3, Hydroxypropyl  
methylcellulose 9004-67-5, Methylcellulose 9004-74-4,  
Methoxy-polyethylene glycol 9004-81-3, Polyethylene glycol laurate  
9004-95-9, Polyethylene glycol cetyl ether 9004-96-0, Polyethylene  
glycol oleate 9004-98-2, Polyethylene glycol oleyl ether 9004-99-3,  
Polyethylene glycol stearate 9005-00-9, Polyethylene glycol stearyl  
ether 9005-02-1, Polyethylene glycol dilaurate 9005-07-6, Polyethylene  
glycol dioleate 9005-08-7, Polyethylene glycol distearate 9005-32-7D,  
Alginic acid, salts 9005-37-2, Propylene glycol alginate 9005-63-4D,  
Polyoxyethylene **sorbitan, esters with fatty**  
**acids** 9005-64-5, Polysorbate 20 9005-65-6, Polysorbate 80  
9005-66-7, Tween 40 9005-67-8, Tween 60 9005-70-3, Tween 85  
9007-48-1, Polyglyceryl oleate 9009-32-9, Polyglyceryl stearate  
9011-29-4 9016-45-9 9041-08-1, Heparin sodium 9050-36-6,  
Maltodextrin 9062-73-1, Polyethylene glycol **sorbitan** laurate  
9062-90-2, Polyethylene glycol **sorbitan** oleate 11140-04-8,  
Imwitor 988 12619-70-4, Cyclodextrin 12619-70-4D, Cyclodextrin,  
propanediol and sulfobutyl ethers 13081-97-5, Pentaerythrityl distearate  
13552-80-2, Glyceryl triundecanoate 13784-61-7, Pentaerythritol  
tetracaprate 14440-80-3, Stearoyl-2-lactylate 14465-68-0, Glyceryl  
trilinolenate 14605-22-2, Tauroursodeoxycholic acid 19321-40-5,  
Pentaerythrityl tetraoleate 22882-95-7, Isopropyl linoleate  
25168-73-4, Sucrose monostearate 25265-75-2, Butanediol 25322-68-3D,  
Polyethylene glycol, esters 25322-69-4, Polypropylene glycol  
25339-99-5, Sucrose monolaurate 25496-72-4, Glyceryl monooleate  
25618-55-7D, **Polyglycerol, esters with fatty**  
**acids** 25637-84-7, Glyceryl dioleate 25637-97-2, Sucrose  
dipalmitate 26264-14-2D, Propanediol, ethers with cyclodextrin  
26266-57-9, **Sorbitan** monopalmitate 26266-58-0,  
**Sorbitan** trioleate 26402-22-2, Glyceryl monocaprate  
26402-26-6, Glyceryl monocaprylate 26446-38-8, Sucrose monopalmitate  
**26658-19-5, Sorbitan** tristearate 27154-43-4D,  
Piperidone, N-alkyl derivs. 27195-16-0, Sucrose distearate 27215-38-9,  
Glyceryl monolaurate 27321-96-6, Polyethylene glycol cholesterol  
27638-00-2, Glyceryl dilaurate 29874-09-7, Myristoyl carnitine  
31692-85-0, Glycofurol 31694-55-0D, Polyoxyethylene **glycerol,**  
**esters with fatty acids** 33069-62-4,  
Paclitaxel 36354-80-0, Glyceryl dicaprylate 37220-82-9, Peceol  
37321-62-3, Propylene glycol laurate 37348-65-5, Linoleic acid glyceride  
42924-53-8, Nabumetone 49562-28-9, Fenofibrate 51192-09-7 51852-65-4  
51938-44-4, **Sorbitan** sesquisteate 53988-07-1, Glyceryl  
dicaprate 54392-26-6, **Sorbitan** monoisostearate 59865-13-3,  
Cyclosporin A 62125-22-8, Pentaerythritol tetraisostearate 64480-66-6,  
Glycoursodeoxycholic acid 68958-64-5, Polyethylene glycol glyceryl



trioleate 69070-98-0 76009-37-5 77944-79-7, Softisan 378  
79665-94-4 83138-62-9, Polyglyceryl isostearate 91161-71-6,  
Terbinafine 93790-70-6, Cholylsarcosine 93790-72-8 94423-19-5  
102051-00-3 106392-12-5, Polyoxyethylene-polyoxypropylene block  
copolymer 110540-43-7 129318-43-0, Alendronate sodium 150372-93-3,  
Polyethylene glycol glycerol laurate 162011-90-7, Rofecoxib  
301524-91-4, Captex 810

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(clear aqueous **dispersions** of triglyceride and surfactants for  
delivery of drugs and nutrients)

IT 50-70-4D, Sorbitol, **esters** 112-80-1, Oleic  
acid, biological studies 1338-43-8, **Sorbitan**  
monooleate 26658-19-5, **Sorbitan** tristearate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(clear aqueous **dispersions** of triglyceride and surfactants for  
delivery of drugs and nutrients)

L68 ANSWER 9 OF 57 HCA COPYRIGHT 2004 ACS on STN

133:334360 Oil and fat **compositions** with controlled contents of  
medium-chain **fatty acids** in constituent **fatty**  
**acids** and cooking oils containing the **compositions**.  
Takeuchi, Hiroyuki; Itakura, Megumi; Kubota, Fumie; Taguchi, Nobuo  
(Nisshin Oil Mills Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000309794 A2  
20001107, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP  
1999-316243 19991108. PRIORITY: JP 1998-323665 19981113; JP 1999-49300  
19990226.

AB The compns., which hardly become body fat and have cooking properties  
similar to those of usual edible oils, show content of medium-chain  
**fatty acids** in the total constituent **fatty**  
**acids** 5-23% and content of triglycerides having 2 medium-chain  
**fatty acids** in the total triglycerides 1-20%. Cooking  
oils containing the above compns. are also claimed. The oil and fat compns.  
preferably show content of glycerides having 3 medium-chain **fatty**  
**acids** in the total triglycerides  $\leq 3\%$  and content of  
long-chain saturated **fatty acids** in the total constituent  
long-chain **fatty acids**  $\leq 20\%$ . The oil and fat  
compns. may contain (a)  $\geq 1$  selected from sucrose **fatty**  
**acid esters** and polyglycerin **fatty**  
**acid esters** 0.1-3, (b) succinic acid  
**monoglycerides** 0.01-2, and (c)  $\geq 1$  selected from  
**monoglycerides**, diglycerides, sorbitol **fatty**  
**acid esters**, and **sorbitan fatty**  
**acid esters** 0.1-3 at total content of (a), (b), and (c)  
0.3-5%. A mixture of 80 parts purified rapeseed oil and 20 parts  
medium-chain triglycerides (caprylic acid:capric acid 3:1) was treated  
with MeONa at 120° for 30 min for random  
**transesterification**, and the resulting oil composition showing  
triglyceride composition The composition was mixed with Ryoto Sugar **Ester**  
(sucrose **fatty acid ester**) 170 2.5, Poem B  
10 (succinic acid **monoglyceride**) 0.1, and Poem O 80 (  
**sorbitan fatty acid ester**) 1% to  
give a cooking oil composition Preventive effect of the composition against  
accumulation of body fat was shown in rats. The composition was used to frying  
vegetables and deep-frying of shrimp, croquettes, and chicken.

IC ICM C11C003-10

ICS A23D009-00; C11B005-00

CC 17-9 (Food and Feed Chemistry)

ST cooking oil compn medium chain **fatty acid** content;

**emulsifier** sucrose **fatty acid ester**  
cooking oil compn; polyglycerin **fatty acid**  
**emulsifier** cooking oil compn; sorbitol **fatty**  
**acid ester emulsifier** cooking oil compn;  
**sorbitan fatty acid ester**  
**emulsifier** cooking oil compn

IT Glycerides, biological studies  
RL: FFD (Food or feed use); PNU (Preparation, unclassified); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(C6-12, saturated; cooking oil compns. with controlled contents of  
medium-chain **fatty acids** in constituent  
**fatty acids**)

IT **Emulsifying agents**  
(antifoaming agents; cooking oil compns. with controlled contents of  
medium-chain **fatty acids** in constituent  
**fatty acids**)

IT Fats and Glyceridic oils, biological studies  
RL: FFD (Food or feed use); PNU (Preparation, unclassified); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(cooking oil compns. with controlled contents of medium-chain  
**fatty acids** in constituent **fatty**  
**acids**)

IT Edible oils  
RL: FFD (Food or feed use); RCT (Reactant); BIOL (Biological study); RACT  
(Reactant or reagent); USES (Uses)  
(cooking oil compns. with controlled contents of medium-chain  
**fatty acids** in constituent **fatty**  
**acids**)

IT Antifoaming agents  
(**emulsifiers**; cooking oil compns. with controlled contents of  
medium-chain **fatty acids** in constituent  
**fatty acids**)

IT **Fatty acids**, biological studies  
RL: FFD (Food or feed use); MOA (Modifier or additive use); BIOL  
(Biological study); USES (Uses)  
(**esters** with polyhydric alcs., antifoaming agents; cooking  
oil compns. with controlled contents of medium-chain **fatty**  
**acids** in constituent **fatty acids**)

IT Cooking  
(frying; cooking oil compns. with controlled contents of medium-chain  
**fatty acids** in constituent **fatty**  
**acids**)

IT Glycerides, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(long-chain, controlled content of; cooking oil compns. with controlled  
contents of medium-chain **fatty acids** in constituent  
**fatty acids**)

IT Corn oil  
Palm oil  
Rape oil  
Soybean oil  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(**transesterification** with caprylic acid- and capric  
acid-containing triglycerides; cooking oil compns. with controlled contents  
of medium-chain **fatty acids** in constituent  
**fatty acids**)

IT 37318-79-9, Poem O 80 52683-61-1, Ryoto Sugar **Ester** O 170  
55840-14-7, Poem B 10

RL: FFD (Food or feed use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)  
(antifoaming agent; cooking oil compns. with controlled contents of medium-chain **fatty acids** in constituent **fatty acids**)

IT **50-70-4D, Sorbitol, fatty acid esters**  
**57-50-1D, Sucrose, fatty acid esters**  
**110-15-6D, Succinic acid, esters with monoglycerides**  
**12441-09-7D, Sorbitan, fatty acid esters**  
**25618-55-7D, Polyglycerin, fatty acid esters**

RL: FFD (Food or feed use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)  
(antifoaming agents; cooking oil compns. with controlled contents of medium-chain **fatty acids** in constituent **fatty acids**)

IT **50-70-4D, Sorbitol, fatty acid esters**  
RL: FFD (Food or feed use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)  
(antifoaming agents; cooking oil compns. with controlled contents of medium-chain **fatty acids** in constituent **fatty acids**)

L68 ANSWER 10 OF 57 HCA COPYRIGHT 2004 ACS on STN

133:213151 Pharmaceutical **compositions** and methods for improved delivery of hydrophobic therapeutic agents. Patel, Manesh V.; Chen, Feng-Jing (Lipocine, Inc., USA). PCT Int. Appl. WO 2000050007 A1 **20000831**, 98 pp. DESIGNATED STATES: W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 2000-US165 20000105. PRIORITY: US 1999-258654 19990226.

AB The present invention relates to triglyceride-free pharmaceutical compns. for delivery of hydrophobic therapeutic agents. Compns. of the present invention include a hydrophobic therapeutic agent and a carrier, where the carrier is formed from a combination of a hydrophilic surfactant and a hydrophobic surfactant. Upon dilution with an aqueous solvent, the composition forms a clear, aqueous **dispersion** of the surfactants containing the therapeutic agent. The invention also provides methods of treatment with hydrophobic therapeutic agents using these compns. A pharmaceutical composition contained cyclosporin 0.14, Cremophor RH-40 0.41, Arlacell186 0.29, sodium taurocholate 0.26, and propylene glycol 0.46 mg.

IC ICM A61K009-127  
ICS A61K009-107; A61K038-13  
CC 63-6 (Pharmaceuticals)

IT **Monoglycerides**  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(acetates; pharmaceutical compns. and methods for improved delivery of hydrophobic therapeutic agents)

IT **Fatty acids, biological studies**  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(essential; pharmaceutical compns. and methods for improved delivery of hydrophobic therapeutic agents)

- IT Corn oil  
    **Fatty acids**, biological studies  
    Glycerides, biological studies  
    Olive oil  
    Palm kernel oil  
    Peanut oil  
    Sterols  
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
        (ethoxylated; pharmaceutical compns. and methods for improved delivery  
        of hydrophobic therapeutic agents)
- IT Amino **acids**, biological studies  
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
        (**fatty acid** derivs.; pharmaceutical compns. and  
        methods for improved delivery of hydrophobic therapeutic agents)
- IT Alcohols, biological studies  
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
        (lower, **fatty acids esters**;  
        pharmaceutical compns. and methods for improved delivery of hydrophobic  
        therapeutic agents)
- IT Alcohols, biological studies  
    Amides, biological studies  
    Bile acids  
    Corticosteroids, biological studies  
    Diglycerides  
    Esters, biological studies  
        **Fatty acids**, biological studies  
    Glycerides, biological studies  
    Lecithins  
    Lysophosphatidic acids  
    Lysophosphatidylcholines  
    Lysophosphatidylethanolamines  
    Lysophosphatidylserines  
    Lysophospholipids  
        **Monoglycerides**  
    Peptides, biological studies  
    Phosphatidic acids  
    Phosphatidylcholines, biological studies  
    Phosphatidylethanolamines, biological studies  
    Phosphatidylglycerols  
    Phosphatidylserines  
    Phospholipids, biological studies  
    Polyoxyalkylenes, biological studies  
    Salts, biological studies  
    Sex hormones  
    Sterols  
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
        (pharmaceutical compns. and methods for improved delivery of  
        hydrophobic therapeutic agents)
- IT **Fatty acids**, biological studies  
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
        (salts; pharmaceutical compns. and methods for improved delivery of  
        hydrophobic therapeutic agents)
- IT 50-14-6, Ergocalciferol 50-21-5D, Lactic acid, glycerides 50-24-8,  
    Prednisolone 50-28-2, EStradiol, biological studies 50-70-4, Sorbitol,  
    biological studies 51-48-9, L-Thyroxine, biological studies 52-01-7,  
    Spironolactone 55-98-1, Busulphan 56-81-5, 1,2,3-Propanetriol,  
    biological studies **56-81-5D, Glycerol**, polyethylene  
    **fatty acid esters** 57-10-3, Hexadecanoic

acid, biological studies 57-11-4, Octadecanoic acid, biological studies 57-55-6, 1,2-Propanediol, biological studies 57-55-6D, Propylene glycol, ethers 57-83-0, Progesterone, biological studies 57-88-5, Cholesterol, biological studies 57-88-5D, Cholesterol, polyoxyethylene derivs. 60-33-3, 9,12-Octadecadienoic acid (9Z,12Z)-, biological studies 64-17-5, Ethanol, biological studies 66-76-2, Dicoumarol 67-20-9, Nitrofurantoin 67-45-8, Furazolidone 67-63-0, Isopropanol, biological studies 67-96-9, Dihydrotachysterol 67-97-0, Cholecalciferol 69-65-8, Mannitol 71-36-3, Butanol, biological studies 76-57-3, Codeine 76-99-3, Methadone 77-89-4, Acetyl triethylcitrate 77-90-7, Acetyl tributyl citrate 77-92-9D, Citric acid, diglycerides 77-93-0, Triethylcitrate 77-94-1, Tributylcitrate 81-24-3 81-25-4 83-44-3 87-33-2, Isosorbide dinitrate 87-69-4D, Tartaric acid, glycerides, biological studies 90-82-4, Pseudoephedrine 100-51-6, Benzenemethanol, biological studies 102-76-1, Triacetin 104-31-4, Benzonatate 105-37-3, Ethyl propionate 105-54-4, Ethyl butyrate 105-60-2, biological studies 105-60-2D, Caprolactam, N-Alkyl derivs. 106-32-1, Ethyl caprylate 107-21-1, 1,2-Ethanediol, biological studies 110-27-0, Isopropyl myristate 111-03-5, Glyceryl monooleate 111-62-6, Crodamol EO 111-90-0, Transcutol **112-80-1**, 9-Octadecenoic acid (9Z)-, biological studies 113-15-5, Ergotamine 113-92-8, Chlorpheniramine 115-77-5, biological studies 115-83-3, Pentaerythrityl Tetra stearate 124-07-2, Octanoic acid, biological studies 125-84-8, Aminogluthethimide 126-07-8, Griseofulvin 127-19-5, Dimethylacetamide 128-13-2 141-22-0 142-18-7, Glyceryl monolaurate 142-62-1, Hexanoic acid, biological studies 142-91-6, Isopropyl palmitate 143-07-7, Dodecanoic acid, biological studies 151-41-7, Lauryl sulfate 155-97-5, Pyridostigmine 298-46-4, 5H-Dibenz[b,f]azepine-5-carboxamide 298-57-7, Cinnarizine 298-81-7, Methoxsalen 300-62-9, Amphetamine 302-79-4, Tretinoin 303-49-1, Clomipramine 321-64-2, Tacrine 334-48-5, Decanoic acid 359-83-1, Pentazocine 360-65-6 378-44-9, Betamethasone 404-86-4, Capsaicin 437-38-7, Fentanyl 443-48-1, Metronidazole 463-40-1 474-25-9 475-31-0 511-12-6, Dihydroergotamine 516-35-8 516-50-7 520-85-4, Medroxyprogesterone 542-28-9, 8-Valerolactone 544-35-4, Ethyl linoleate 544-63-8, Tetradecanoic acid, biological studies 577-11-7, Sodium docusate 595-33-5 616-45-5, Pyrrolidone 616-45-5D, Pyrrolidone, N-Alkyl derivs. 623-84-7, Propylene glycol diacetate 640-79-9 675-20-7, 2-Piperidone 872-50-4, N-Methylpyrrolidone, biological studies 1134-47-0, Baclofen 1331-12-0, Propylene glycol monoacetate 1335-71-3, Propylene glycol oleate 1338-39-2, Arlacel 20 **1338-43-8**, Span 80 1397-89-3, Amphoteracin B 1406-16-2, Vitamin D 1406-18-4, Vitamin E 1951-25-3, Amiodarone 1972-08-3, Tetrahydrocannabinol 2687-91-4, N-Ethylpyrrolidone 2687-94-7 2687-96-9 3068-88-0,  $\beta$ -Butyrolactone 3445-11-2 4419-39-0, Beclomethasone 4759-48-2, Isotretinoin 5104-49-4, Flurbiprofen 5306-85-4, Dimethyl isosorbide 7261-97-4, Dantrolene 7488-99-5,  $\alpha$  Carotene 7664-93-9D, Sulfuric acid, salts alkyl derivs., biological studies 7689-03-4, Camptothecin 8007-43-0, **Sorbitan** sesquioleate 9002-89-5, Polyvinylalcohol 9002-92-0, Brij 30 9002-96-4 9003-39-8, Polyvinylpyrrolidone 9004-65-3, Hydroxypropyl methylcellulose 9004-74-4, Methoxy polyethylene glycol 9004-81-3, Polyoxyethylene laurate 9004-95-9, Polyoxyethylene cetyl ether 9004-96-0, **PEG**-32 oleate 9004-98-2, Polyoxyethylene oleyl ether 9004-99-3, Polyoxyethylene stearate 9005-00-9, Polyoxyethylene stearyl ether 9005-02-1, Polyoxyethylene dilaurate 9005-07-6, Polyoxyethylene dioleate 9005-08-7, Polyoxyethylene distearate 9005-32-7D, Alginic acid, salts 9005-37-2, Propylene glycol alginate 9005-63-4D, Polyoxyethylene **sorbitan**

, derivs. 9005-63-4D, Polyoxyethylene **sorbitan**, **fatty acid esters** 9005-64-5, Tween 20 9005-65-6, Polysorbate 80 9005-66-7, Tween 40 9005-67-8, Tween 60 9007-48-1, PLUROLOLEIQUECC497 9011-21-6, Polyoxyethylene glyceryl stearate 9016-45-9 9036-19-5 10238-21-8, Glyburide 10540-29-1, Tamoxifen 11103-57-4, Vitamin A 11140-04-8, Imwitor 988 12001-79-5, Vitamin K 12619-70-4, Cyclodextrin 12619-70-4D, Cyclodextrin, derivs. 12619-70-4D, Cyclodextrin, hydroxypropyl ethers 13081-97-5, Pentaerythrityl di stearate 14440-80-3, Stearoyl-2-lactylate 14605-22-2 15307-86-5, Diclofenac 15574-96-6, Pizotifen 15686-51-8, Clemastine 15687-27-1, Ibuprofen 18559-94-9, Albuterol 19356-17-3, Calcifediol 20594-83-6, Nalbuphine 20830-75-5, Digoxin 21256-18-8, Oxaprozin 21829-25-4, Nifedipine 22882-95-7, Isopropyl linoleate 22916-47-8, Miconazole 23288-49-5, Probuco 25168-73-4, Sucrose monostearate 25265-75-2, Butanediol 25322-68-3 25322-69-4, Polypropylene glycol 25339-99-5, Sucrose monolaurate 25523-97-1, Dexchlorpheniramine 25618-55-7D, **Polyglycerol**, **fatty acid esters** 25637-84-7, Glyceryl dioleate 25637-97-2, Sucrose dipalmitate 25812-30-0, Gemfibrozil 26266-57-9, **Sorbitan** monopalmitate 26266-58-0, **Sorbitan** Trioleate 26402-22-2, Glyceryl monocaprate 26402-26-6, Glyceryl monocaprylate 26446-38-8, Sucrose monopalmitate 27154-43-4D, Piperidone, N-Alkyl derivs. 27195-16-0, Sucrose distearate 27203-92-5, TRamadol 27638-00-2, Glyceryl dilaurate 29094-61-9, Glipizide 29767-20-2, Teniposide 31692-85-0, Glycofurol 32222-06-3, Calcitriol 33069-62-4, Paclitaxel 33419-42-0, Etoposide 34911-55-2, Bupropion 36354-80-0, Glyceryl dicaprylate 37321-62-3, Lauroglycol 38304-91-5, Minoxidil 41340-25-4, Etodolac 42924-53-8, Nabumetone 43200-80-2, Zopiclone 49562-28-9, Fenofibrate 49697-38-3, Rimexolone 51333-22-3, Budesonide 51481-61-9, Cimetidine 51938-44-4, **Sorbitan** sesquisteate 52581-71-2, Volpo 3 53123-88-9, Sirolimus 53168-42-6, Myvacet 9-45 53179-11-6, Loperamide 53230-10-7, Mefloquine 53988-07-1, Glyceryl dicaprate 54392-26-6, **Sorbitan** monoisostearate 54965-21-8, Albendazole 55079-83-9, Acitretin 55142-85-3, Ticlopidine 57107-97-8, Polyoxyethylene glyceryl oleate 59467-70-8, Midazolam 59865-13-3, Cyclosporine 60142-96-3, Gabapentin 61379-65-5, Rifapentine 61869-08-7 62013-04-1, Dirithromycin 62356-64-3 63590-64-7, Terazosin 63612-50-0, Nilutamide 63675-72-9, Nisoldipine 65271-80-9, Mitoxantrone 65277-42-1, Ketoconazole 68506-86-5, Vigabatrin

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(pharmaceutical compns. and methods for improved delivery of hydrophobic therapeutic agents)

IT **56-81-5D, Glycerol**, polyethylene **fatty**

**acid esters** 112-80-1, 9-Octadecenoic acid (9Z)-, biological studies **1338-43-8**, Span 80

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(pharmaceutical compns. and methods for improved delivery of hydrophobic therapeutic agents)

L68 ANSWER 11 OF 57 HCA COPYRIGHT 2004 ACS on STN

133:119461 Propolis food **compositions** and their manufacture.

Hamanaka, Hiroyoshi; Midorikawa, Toshi (Nippon Propolis K. K., Japan).

Jpn. Kokai Tokkyo Koho JP 2000201634 A2 **20000725**, 7 pp.

(Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-6335 19990113.

AB The food compns. are manufactured by mixing and heating propolis in H<sub>2</sub>O or mixts. of H<sub>2</sub>O with water-soluble solvents capable of forming hydrogen bonds with H<sub>2</sub>O, containing dissolved or **dispersed** organic acids having

≥2 CO<sub>2</sub>H groups or those having CO<sub>2</sub>H and amino groups and optionally containing micellar **polyol fatty acid ester**-type **emulsifying** agents and removing insol. propolis residues from the mixts. to give soluble propolis components dissolved in H<sub>2</sub>O or mixts. of H<sub>2</sub>O with the water-soluble solvents. The food compns. show good storage stability, improved texture, and antibacterial properties and are useful for treatment of chronic rhinitis and pollen allergy.

IC ICM A23L001-076

CC 17-14 (Food and Feed Chemistry)

Section cross-reference(s): 1, 63

ST propolis food aq solvent carboxylate **emulsifier**; **polyol fatty ester emulsifier** propolis food; amino acid water soluble propolis food; rhinitis treatment propolis food carboxylate; pollen allergy treatment propolis food carboxylate

IT Pollen

(allergy; manufacture of storage-stable propolis foods dissolved in aqueous solvents containing carboxylic acids and optional **polyol fatty acid ester emulsifiers**)

IT **Fatty acids**, biological studies

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(**esters**, with **polyols**; manufacture of storage-stable propolis foods dissolved in aqueous solvents containing carboxylic acids and optional **polyol fatty acid ester emulsifiers**)

IT Solvents

(hydrophilic; manufacture of storage-stable propolis foods dissolved in aqueous

solvents containing carboxylic acids and optional **polyol fatty acid ester emulsifiers**)

IT Allergy inhibitors

Anti-inflammatory agents

Health food

Propolis

(manufacture of storage-stable propolis foods dissolved in aqueous solvents containing carboxylic acids and optional **polyol fatty acid ester emulsifiers**)

IT Amino acids, biological studies

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(manufacture of storage-stable propolis foods dissolved in aqueous solvents containing carboxylic acids and optional **polyol fatty acid ester emulsifiers**)

IT **Emulsifying agents**

(nonionic; manufacture of storage-stable propolis foods dissolved in aqueous solvents containing carboxylic acids and optional **polyol fatty acid ester emulsifiers**)

IT Carboxylic acids, biological studies

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(polycarboxylic; manufacture of storage-stable propolis foods dissolved in aqueous solvents containing carboxylic acids and optional **polyol fatty acid ester emulsifiers**)

IT Nose

(rhinitis, chronic; manufacture of storage-stable propolis foods dissolved in aqueous solvents containing carboxylic acids and optional **polyol fatty acid ester emulsifiers**)

IT 50-70-4, D-Sorbitol, biological studies 56-40-6, Glycine, biological studies 56-41-7, L-Alanine, biological studies 56-81-5, 1,2,3-Propanetriol, biological studies

56-84-8, Aspartic acid, biological studies 56-86-0, Glutamic acid, biological studies 57-55-6, 1,2-**Propanediol**, biological studies 58-86-6, D-Xylose, biological studies 64-17-5, Ethanol, biological studies 77-92-9, biological studies 124-04-9, Hexanedioic acid, biological studies 1330-80-9, Propylene glycol monooleate 1338-39-2, **Sorbitan** monolaurate 6915-15-7 7732-18-5, Water, biological studies 25339-99-5, Sucrose monolaurate 25496-92-8, Sucrose monooleate 27215-38-9, Glycerin monolaurate 71012-10-7, Tetraglycerin monooleate 83707-54-4, **Sorbitan** monoricinoleate 123609-87-0 285556-97-0 285556-98-1

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(manufacture of storage-stable propolis foods dissolved in aqueous solvents containing carboxylic acids and optional **polyol fatty acid ester emulsifiers**)

IT 50-70-4, D-Sorbitol, biological studies 56-81-5, 1,2,3-**Propanetriol**, biological studies

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(manufacture of storage-stable propolis foods dissolved in aqueous solvents containing carboxylic acids and optional **polyol fatty acid ester emulsifiers**)

L68 ANSWER 12 OF 57 HCA COPYRIGHT 2004 ACS on STN

133:63580 Method for producing nanoparticle **dispersions**. Schroeder, Christine; Dolhaine, Hans; Hempelmann, Rolf; Roth, Marcel (Henkel K.-G.a.A., Germany). PCT Int. Appl. WO 2000035577 A1 20000622, 22 pp. DESIGNATED STATES: W: JP; RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (German). CODEN: PIXXD2. APPLICATION: WO 1999-EP9406 19991202. PRIORITY: US 1998-PV111859 19981211.

AB Nanoparticle **dispersions** with particle diams. of 10-300 nm are produced by (1) dissolving organic active substances in a suitable primary solvent; (2) introducing the solution into a 2nd solvent which is not miscible with the primary solvent and adding **emulsifiers**; (3) introducing the resulting macroemulsion into a 3rd solvent which is heated to 30-120°, evaporating the primary solvent at the same time; and optionally (4) distilling off the liquid components of the resulting nanoscale **dispersion** completely or in part. Thus, a solution of 0.26 g phytosterol in 10 g Et2O was **dispersed** in a mixture of PEG -20 **sorbitan** monopalmitate 5 and H2O 50 g to produce a macroemulsion with a particle size of 50-500 nm. This **emulsion** was added dropwise to 300 mL H2O at 90° with stirring; during this process the Et2O distilled off, leaving 25 g of a milky **dispersion** with a particle size of 40-200 nm containing 1 weight% phytosterol.

IC ICM B01J013-06

CC 62-1 (Essential Oils and Cosmetics)

Section cross-reference(s): 63

ST nanoparticle **dispersion** cosmetic pharmaceutical

IT **Fatty acids**, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(alkoxylated, **emulsifiers**; method for producing nanoparticle **dispersions**)

IT Glycosides

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(alkyl oligoglycosides, **emulsifiers**; method for producing nanoparticle **dispersions**)

IT Glycosides



RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(alkyl polyglycosides, **esters** with **fatty acids, emulsifiers**; method for producing nanoparticle **dispersions**)

IT Phenols, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(alkyl, alkoxylated, **emulsifiers**; method for producing nanoparticle **dispersions**)

IT Glycosides  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(alkyl, **emulsifiers**; method for producing nanoparticle **dispersions**)

IT Phenols, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(alkyl, ethoxylated, **emulsifiers**; method for producing nanoparticle **dispersions**)

IT Carboxylic acids, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(aromatic, esters, with fatty alcs.; method for producing nanoparticle **dispersions**)

IT Alcohols, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(branched, solvents; method for producing nanoparticle **dispersions**)

IT Carboxylic acids, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(dicarboxylic, esters, with fatty alcs.; method for producing nanoparticle **dispersions**)

IT Diglycerides  
**Monoglycerides**  
Polyoxyalkylenes, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(**emulsifiers**; method for producing nanoparticle **dispersions**)

IT **Fatty acids**, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(epoxy, ring opening products with polyols; method for producing nanoparticle **dispersions**)

IT Alditols  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(**esters**, with **fatty acids, emulsifiers**; method for producing nanoparticle **dispersions**)

IT Carboxylic acids, biological studies  
**Fatty acids**, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(**esters**, with **fatty alcs.**; method for producing

nanoparticle **dispersions**)

IT Castor oil  
Fatty acids, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(ethoxylated, **emulsifiers**; method for producing nanoparticle **dispersions**)

IT Epoxides  
Epoxides  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(fatty alkyl, carboxy, ring opening products with polyols; method for producing nanoparticle **dispersions**)

IT Alcohols, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(fatty, alkoxyated, **emulsifiers**; method for producing nanoparticle **dispersions**)

IT Alcohols, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(fatty, ethoxylated, **emulsifiers**; method for producing nanoparticle **dispersions**)

IT Alcohols, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(fatty, propoxylated, **emulsifiers**; method for producing nanoparticle **dispersions**)

IT Alcohols, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(fatty; method for producing nanoparticle **dispersions**)

IT Castor oil  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(hydrogenated, ethoxylated, **emulsifiers**; method for producing nanoparticle **dispersions**)

IT Carboxylic acids, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(hydroxy, esters, with fatty alcs.; method for producing nanoparticle **dispersions**)

IT Alcohols, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(lanolin, **emulsifiers**; method for producing nanoparticle **dispersions**)

IT Drug delivery systems  
(liqs., **dispersions**; method for producing nanoparticle **dispersions**)

IT Antioxidants  
Cosmetics  
Dyes  
Emulsifying agents  
Evaporation  
Perfumes  
Solvents  
Sunscreens

- (method for producing nanoparticle **dispersions**)
- IT Enzymes, biological studies  
Flavones  
Sterols  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
- (method for producing nanoparticle **dispersions**)
- IT **Fatty acids**, biological studies  
Glycerides, biological studies  
Soaps  
Waxes  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
- (method for producing nanoparticle **dispersions**)
- IT Polyoxyalkylenes, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
- (mono(fatty acyl)-terminated, **emulsifiers**; method for producing nanoparticle **dispersions**)
- IT **Emulsions**  
(nanoparticle **dispersions** production from; method for producing nanoparticle **dispersions**)
- IT Drug delivery systems  
(nanoparticles; method for producing nanoparticle **dispersions**)
- IT Polysiloxanes, biological studies  
Polysiloxanes, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
- (polyether-, **emulsifiers**; method for producing nanoparticle **dispersions**)
- IT Alcohols, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
- (polyhydric, esters, **emulsifiers**; method for producing nanoparticle **dispersions**)
- IT Polyethers, biological studies  
Polyethers, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
- (siloxane-, **emulsifiers**; method for producing nanoparticle **dispersions**)
- IT Essential oils  
Ethers, biological studies  
Hydrocarbons, biological studies  
Naphthenes  
Polysiloxanes, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
- (solvents; method for producing nanoparticle **dispersions**)
- IT 77-92-9D, Citric acid, mixed **esters** with **fatty acids** and **fatty alcs.** and pentaerythritol 106-14-9D, 12-Hydroxystearic acid, **esters** with **polyols** 115-77-5D, Pentaerythritol, **esters** with **fatty acids** 126-58-9D, Dipentaerythritol, **esters** with **fatty acids** 141-22-0D, Ricinoleic acid, **esters** with **polyols** 3149-68-6D, Methyl glucoside, mixed

**esters with fatty acids and polyols**

7664-38-2D, Phosphoric acid, alkyl esters, biological studies

12441-09-7D, **Sorbitan, esters with fatty**

**acids** 25322-68-3D, **PEG, mono(fatty acyl)-terminated**

25322-69-4D, Polypropylene glycol, mono(fatty acyl)-terminated

25618-55-7D, Polyglycerin, **esters with fatty**

**acids** 31694-55-0D, mono- and **diesters with**

**fatty acids**

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(**emulsifiers**; method for producing nanoparticle

**dispersions**)

IT 1338-39-2, **Sorbitan** monolaurate 9005-66-7 9012-76-4,  
Chitosan 29463-06-7D, Tris(2-hydroxyethyl)methylammonium methosulfate,  
dicocoyl esters 109972-90-9

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(method for producing nanoparticle **dispersions**)

IT 60-29-7, Diethyl ether, biological studies 64-17-5, Ethanol, biological  
studies 71-23-8, n-Propanol, biological studies 110-54-3, Hexane,  
biological studies 111-65-9, Octane, biological studies 142-82-5,  
Heptane, biological studies 629-82-3, Dioctyl ether 9004-98-2, Oleth-2

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(solvent; method for producing nanoparticle **dispersions**)

IT 65-85-0D, Benzoic acid, **esters with fatty**  
alcs., biological studies 110-82-7D, Cyclohexane, derivs., biological  
studies 463-79-6D, Carbonic acid, **esters with**

**fatty alcs.**, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(solvents; method for producing nanoparticle **dispersions**)

L68 ANSWER 13 OF 57 HCA COPYRIGHT 2004 ACS on STN

132:171126 Flocculated **suspension** of megestrol acetate. Ragunathan,

Narayan; Chao, James C.; Femia, Robert A.; Ross, Malcolm S. F.

(Pharmaceutical Resources, Inc., USA). U.S. US 6028065 A

**20000222**, 5 pp. (English). CODEN: USXXAM. APPLICATION: US

1998-63241 19980420.

AB A novel oral antineoplastic composition comprises a stable flocculated  
**suspension** in water containing megestrol acetate,  $\geq 1$  of  
**PEG**, propylene glycol, glycerol, and sorbitol, and a surfactant,  
provided polysorbate and **PEG** are not simultaneously present.  
Any surfactant, regardless of the length of the hydrophobic contact area  
on its hydrophobic group, can effectively wet megestrol acetate and form a  
stable flocculated **suspension**, provided  $\geq 1$  of the other  
named compds. is present. Thus, a **suspension** was prepared containing  
megestrol acetate 4.000, glycerol 5.000, sorbitol 15.000, docusate Na  
(surfactant) 0.002, xanthan gum 0.250, NaOBz 0.200, citric acid 0.300, Na  
citrate 0.060, sucrose 5.000, lemon flavoring 0.080, and H2O 70.108 weight%.

IC ICM A61K009-10

ICS A61K031-56

NCL 514178000

CC 63-6 (Pharmaceuticals)

ST megestrol acetate oral **suspension** **PEG**; propylene  
glycol megestrol acetate **suspension**; glycerol megestrol acetate  
oral **suspension**; sorbitol megestrol acetate oral  
**suspension**

- IT Amides, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(N-(hydroxyalkyl), surfactants; flocculated **suspension** of megestrol acetate)
- IT Polyoxyalkylenes, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(esters, surfactants; flocculated **suspension** of megestrol acetate)
- IT Alcohols, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(ethoxylated, surfactants; flocculated **suspension** of megestrol acetate)
- IT **Dispersing** agents  
Wetting agents  
(flocculated **suspension** of megestrol acetate)
- IT Polyoxyalkylenes, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(flocculated **suspension** of megestrol acetate)
- IT Alcohols, biological studies  
Alkaline earth salts  
Amines, biological studies  
Carboxylic acids, biological studies  
Phenols, biological studies  
Quaternary ammonium compounds, biological studies  
Sulfonates  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(surfactants; flocculated **suspension** of megestrol acetate)
- IT Drug delivery systems  
(**suspensions**, oral; flocculated **suspension** of megestrol acetate)
- IT 595-33-5, Megestrol acetate  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(flocculated **suspension** of megestrol acetate)
- IT 50-70-4, Sorbitol, biological studies 56-81-5, Glycerol, biological studies 57-55-6, Propylene glycol, biological studies 25322-68-3, Polyethylene glycol  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(flocculated **suspension** of megestrol acetate)
- IT 124-03-8, Cetyldimethylethylammonium bromide 577-11-7, Docusate sodium 9004-99-3, **PEG** stearate  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(surfactant; flocculated **suspension** of megestrol acetate)
- IT **56-81-5D, Glycerol, esters** 107-35-7D, Taurine, N-acyl derivs... 107-97-1D, Sarcosine, N-acyl derivs.. 5138-18-1D, Sulfosuccinic **acid, esters** with **fatty** alcs. 7664-38-2D, Phosphoric acid, esters, biological studies 12441-09-7D, **Sorbitan**, esters 25322-68-3D, **PEG**, esters  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(surfactants; flocculated **suspension** of megestrol acetate)
- IT **56-81-5D, Glycerol, esters**  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(surfactants; flocculated **suspension** of megestrol acetate)

L68 ANSWER 14 OF 57 HCA COPYRIGHT 2004 ACS on STN  
132:97871 Sunscreen **composition** containing an anionic surfactant,

**compositions** filtering ultraviolet radiation and an amphiphilic cationic or dipolar ion compound. Allard, Delphine; Candau, Didier; Morgantini, Luc (L'Oreal, Fr.). PCT Int. Appl. WO 2000002529 A1 **20000120**, 38 pp. DESIGNATED STATES: W: AU, BR, CA, CN, CZ, HU, JP, KR, MX, PL, RU, US; RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (French). CODEN: PIXXD2. APPLICATION: WO 1999-FR1608 19990705. PRIORITY: FR 1998-8828 19980709.

AB A cosmetic composition, in particular for skin and/or hair protection, in the form of a **dispersion** comprise two non-miscible phases stabilized by at least an anionic surfactant selected among the salts of **fatty acid** and of monovalent or polyvalent metals, of ammonium or organic bases, a compound filtering UV radiation capable of being adsorbed at the interface of said non-miscible phases, derived from benzylidene camphor and comprising at least a sulfonic acid function partially or completely neutralized, a metal oxide nanopigment coated with hydrocarbon hydrophobic agents and an amphiphilic cationic or dipolar ion compound which leads with the anionic surfactant to the formation of a compound capable of lowering the water/paraffin oil interfacial tension at 40° by more than 14 mN.m-1 for an anionic surfactant concentration of 0.1 mmole/100g, by more than 26mN.m-1 for an anionic surfactant concentration of

0.5 mmole/100g and by more than 33 mN.m-1 for an anionic surfactant concentration of

1 mmole/100g. A sunscreen **emulsion** contained Arlacel 165 2, stearic acid 2.5, cetyl alc. 0.5, polydimethylsiloxane 5.5, **fatty acid** triglycerides 4, isoparaffin 3, karite butter 1.5, jojoba oil 1.5, titanium oxide nanopigment 5, Uvinul N 539 10, Parsol-1789 2, glycerin 4, propylene glycol 4, benzene 1,4-[di(3-methylidenecampho-10-sulfonic)] acid 0.5%. cocobetaine 2, Pemulen TR1 0.12, hydroxypropylmethyl cellulose 0.1, triethanolamine 0.83, preservatives q.s., perfume q.s., and water q.s. 100%.

IC ICM A61K007-42

CC 62-4 (Essential Oils and Cosmetics)

IT **Fatty acids**, biological studies

Glycols, biological studies

Polyoxyalkylenes, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(**esters**; sunscreen composition containing anionic surfactant, compns.

filtering UV radiation and amphiphilic cationic or dipolar ion compound)

IT **Fatty acids**, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(salts; sunscreen composition containing anionic surfactant, compns.

filtering

UV radiation and amphiphilic cationic or dipolar ion compound)

IT **56-81-5D, Glycerol, esters** 57-09-0,

Cetyltrimethylammonium bromide 57-50-1D, Saccharose, esters 96-55-9,

Decyl betaine 104-74-5, Laurylpyridinium chloride 107-43-7D, Betaine,

cocoacyl derivs. 112-00-5, Dodecyltrimethylammonium chloride 112-03-8,

Stearyltrimethylammonium chloride 122-18-9, Cetalkonium chloride

122-19-0, Stearalkonium chloride 138-32-9, Cetyltrimethylammonium

tosylate 593-81-7, Trimethylammonium chloride 593-81-7D,

Trimethylammonium chloride, cocoacyl derivs. 683-10-3, Lauryl betaine

693-33-4, Cetyl betaine 820-66-6 871-37-4, Oleyl betaine 1119-94-4,

Dodecyltrimethylammonium bromide 1314-13-2, Zinc oxide, biological

studies 1314-23-4, Zirconium oxide, biological studies 1332-37-2, Iron

oxide, biological studies 1406-18-4, Vitamine 2601-33-4 4292-10-8,

Lauramidopropyl betaine 6179-44-8 6197-30-4, Uvinul N 539  
6917-36-8D, Pentitol, esters 7541-59-5D, Tetritol, esters 9005-63-4D,  
Polyoxyethylene sorbitan, esters 11129-18-3, Cerium oxide  
12441-09-7D, **Sorbitan, fatty acid**  
**esters** 13463-67-7, Titanium dioxide, biological studies  
16766-82-8D, benzalkonium salts 16841-14-8, Behenalkonium chloride  
17301-53-0, Behenyltrimethylammonium chloride 25054-76-6, Oleamidopropyl  
betaine 25322-68-3D, **Peg**, esters 25618-55-7D,  
**Polyglycerol, esters** 26920-62-7, Behenyl betaine  
32954-43-1 37139-99-4, Olealkonium chloride 45007-61-2D, Hexitol,  
esters 59272-84-3, Myristamidopropyl betaine 62281-04-3 65060-02-8,  
Cetyltrimethylammonium methosulfate 70356-09-1 71850-81-2  
81646-13-1, Behenyltrimethylammonium methosulfate 84750-06-1, Arlacel  
165 138789-85-2, Pemulen TR1 157101-46-7, Lauralkonium bromide  
191226-60-5

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)

(sunscreen composition containing anionic surfactant, compns. filtering UV  
radiation and amphiphilic cationic or dipolar ion compound)

IT **56-81-5D, Glycerol, esters**

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)

(sunscreen composition containing anionic surfactant, compns. filtering UV  
radiation and amphiphilic cationic or dipolar ion compound)

L68 ANSWER 15 OF 57 HCA COPYRIGHT 2004 ACS on STN

131:350549 Water-in-oil **emulsified fat composition**

containing diglycerides for food use. Mori, Hideki; Masui, Kenji; Tanaka,  
Yukitaka; Yasukawa, Takuji (Kao Corporation, Japan). PCT Int. Appl. WO  
9959422 A1 **19991125**, 20 pp. DESIGNATED STATES: W: BR, CA, CN,  
SG; RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1998-JP2227 19980521.

AB A W/O type **emulsified fat composition** has an oily phase and an aqueous  
phase, wherein the oily phase contains 40% to <95% by weight of diglycerides  
and 5% to <60% by weight of triglycerides. The diglycerides have 0.5% to <20  
% by weight of SS components, 20% to <55% by weight of SU components, and 25%

to

<70% by weight of UU components (where S is a C14-22 saturated **fatty**  
**acid** and U is a C14-22 unsatd. **fatty acid**).

The weight ratio of the C14 and C16 saturated **fatty acid**  
groups contained in the diglycerides to the C18, C20, and C22 saturated  
**fatty acid** groups contained in the diglycerides is 1.0

to 8.0. Use as a margarine with excellent stability and satisfactory  
spreadability is indicated. Thus, suitable diglyceride fractions may be  
obtained by using a com. lipase to obtain **fatty acid**  
fractions from hardened rapeseed oil and palm oil, the mixed **fatty**  
**acids** then being **esterified** with **glycerol** in  
the presence of a lipase with 1,3-position selectivity.

IC ICM A23D007-00

CC **17-9** (Food and Feed Chemistry)

ST fat spread diglyceride **emulsion**; margarine fat spread  
diglyceride **emulsion**

IT **Fatty acids**, biological studies

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(**esters**, with **sorbitan** or sucrose or  
**polyglycerol**; water-in-oil **emulsified fat composition**  
containing diglycerides for food use)

IT Fats and Glyceridic oils, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); PROC (Process); USES (Uses) (rice bran; water-in-oil **emulsified** fat composition containing diglycerides for food use)

IT **Fatty acids**, biological studies

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence) (saturated; water-in-oil **emulsified** fat composition containing diglycerides for food use)

IT Condiments

(seasonings; water-in-oil **emulsified** fat composition containing diglycerides for food use)

IT **Fatty acids**, biological studies

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence) (unsatd.; water-in-oil **emulsified** fat composition containing diglycerides for food use)

IT Antioxidants

Dairy products

**Emulsifying agents**

Flavor

Flavoring materials

Food **emulsions**

Margarine

(water-in-oil **emulsified** fat composition containing diglycerides for food use)

IT Coconut oil

Corn oil

Palm oil

Rape oil

Safflower oil

Soybean oil

Sunflower oil

Tallow

RL: BPR (Biological process); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); PROC (Process); USES (Uses) (water-in-oil **emulsified** fat composition containing diglycerides for food use)

IT Diglycerides

Lecithins

**Monoglycerides**

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(water-in-oil **emulsified** fat composition containing diglycerides for food use)

IT **Emulsions**

(water-in-oil; fat composition containing diglycerides for food use)

IT 57-50-1D, Sucrose, **fatty acid esters**

7647-14-5, Sodium chloride, biological studies 9001-62-1, Lipase

12441-09-7D, **Sorbitan, fatty acid**

**esters** 25618-55-7D, **Polyglycerol, fatty**

**acid esters**

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(water-in-oil **emulsified** fat composition containing diglycerides for food use)

L68 ANSWER 16 OF 57 HCA COPYRIGHT 2004 ACS on STN

131:342026 Use of nanodispersions in pharmaceutical **compositions**.

Supersaxo, Andreas Werner; Weder, Hans Georg; Hueglin, Dietmar; Roeding,



Joachim Friedrich (Ciba Specialty Chemicals Holding Inc., Switz.; Vesifact A.-G.). Eur. Pat. Appl. EP 956853 A2 19991117, 16 pp.

DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (German). CODEN: EPXXDW.

APPLICATION: EP 1999-810383 19990504. PRIORITY: EP 1998-810422 19980511.

- AB Nanodispersions containing a membrane-forming mol. (e.g. a phospholipid or ceramide), an oil-in-water coemulsifier, and a lipophilic component are useful as drug delivery vehicles. The nanodispersions are prepared by mixing these 3 components to form a homogeneous clear liquid, and adding this liquid to an aqueous phase at room temperature, which approximates the phase inversion temperature; the nanodispersion (mean particle size <50 nm) forms with no further energy expenditure for homogenization, sonication, etc. Thus, vitamin A palmitate 4.50, Miglyol 812 30.00, and Polysorbate 80 34.00 weight parts were combined and mixed with a solution of soybean lecithin 17.30 in EtOH 14.20 weight parts to produce a homogeneous clear liquid. This liquid was mixed 1:9 with 10 mM phosphate buffer (pH 7.4) at 50° with stirring to produce a nanodispersion.
- IC ICM A61K009-107  
ICS A61K009-48
- CC 63-6 (Pharmaceuticals)
- ST pharmaceutical nanodispersion phospholipid **emulsifier**; vitamin A nanodispersion phospholipid **emulsifier**; **dispersion** vitamin A phospholipid **emulsifier**
- IT **Fatty acids**, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(C8-20, salts, coemulsifiers; use of nanodispersions in pharmaceutical compns.)
- IT Drug delivery systems  
(**emulsions**; use of nanodispersions in pharmaceutical compns.)
- IT Carbohydrates, biological studies  
**Fatty acids**, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(ethoxylated, coemulsifiers; use of nanodispersions in pharmaceutical compns.)
- IT Drug delivery systems  
(liqs., **dispersions**, nanodispersions; use of nanodispersions in pharmaceutical compns.)
- IT Carbohydrates, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(sugar **esters**, with **fatty acids**, coemulsifiers; use of nanodispersions in pharmaceutical compns.)
- IT Drug delivery systems  
(**suspensions**; use of nanodispersions in pharmaceutical compns.)
- IT Anti-infective agents  
Anti-inflammatory agents  
Antioxidants  
Antitumor agents  
Cardiovascular agents  
**Emulsifying agents**  
Kidney, disease  
Mouthwashes  
Musculoskeletal diseases  
Skin, disease  
(use of nanodispersions in pharmaceutical compns.)
- IT 50-21-5D, Lactic acid, **esters** with **fatty**

**acids** 57-55-6D, Propylene glycol, **esters** with **fatty acids** 1406-18-4D, Vitamin E, ethoxylated derivs.  
7664-38-2D, Phosphoric acid, alkyl esters, biological studies  
7664-93-9D, Sulfuric acid, alkyl and alkenyl esters, biological studies  
12441-09-7D, **Sorbitan**, **esters** with **fatty acids** 25322-68-3D; **PEG**, derivs. 25618-55-7D,  
**Polyglycerol**, **esters** with **fatty acids**  
31694-55-0D, **triesters** with **fatty acids**  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(coemulsifiers; use of nanodispersions in pharmaceutical compns.)

L68 ANSWER 17 OF 57 HCA COPYRIGHT 2004 ACS on STN

131:342025 Use of nanodispersions in cosmetic **formulations**.

Hueglin, Dietmar; Roeding, Joachim Friedrich; Supersaxo, Andreas Werner; Weder, Hans Georg (Ciba Specialty Chemicals Holding Inc., Switz.; Vesifact A.-G.). Eur. Pat. Appl. EP 956851 A1 **19991117**, 28 pp.

DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (German). CODEN: EPXXDW.

APPLICATION: EP 1999-810382 19990504. PRIORITY: EP 1998-810421 19980511.

AB Nanodispersions containing a membrane-forming mol. (e.g. a phospholipid or ceramide), an oil-in-water coemulsifier, and a lipophilic component are useful in cosmetic formulations. The nanodispersions are prepared by mixing these 3 components to form a homogeneous clear liquid, and adding this liquid to an aqueous phase at room temperature, which approximates the phase inversion temperature; the nanodispersion (mean particle size <50 nm) forms with no further energy expenditure for homogenization, sonication, etc. Thus, Parsol MCX 2.59, Parsol 5000 1.11, Miglyol 812 1.30, soybean lecithin 0.50, Polysorbate 80 3.40, and EtOH 1.10 weight parts were combined to produce a homogeneous clear liquid; this liquid was stirred into H2O at 50° to provide a nanodispersion.

IC ICM A61K007-00

CC 63-6 (Pharmaceuticals)

ST cosmetic nanodispersion phospholipid **emulsifier**; sunscreen  
nanodispersion phospholipid **emulsifier**; **dispersion**  
cosmetic phospholipid **emulsifier**

IT **Fatty acids**, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(C8-20, salts, coemulsifiers; use of nanodispersions in cosmetic formulations)

IT Carbohydrates, biological studies

**Fatty acids**, biological studies

Glycerides, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(ethoxylated, coemulsifiers; use of nanodispersions in cosmetic formulations)

IT **Disperse** systems

(nano-; use of nanodispersions in cosmetic formulations)

IT Carbohydrates, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(sugar **esters**, with **fatty acids**,

coemulsifiers; use of nanodispersions in cosmetic formulations)

IT Antioxidants

Cosmetics

**Emulsifying** agents

Hair preparations

## Sunscreens

(use of nanodispersions in cosmetic formulations)

IT 57-11-4, Octadecanoic acid, biological studies 1338-41-6,  
**Sorbitan** monostearate **1338-43-8**, **Sorbitan**  
monooleate 9004-82-4, Sodium lauryl ether sulfate 9005-64-5  
36653-82-4, Cetyl alcohol 106392-12-5, Ethylene oxide/propylene oxide  
block copolymer  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)

(coemulsifier; use of nanodispersions in cosmetic formulations)

IT 50-21-5D, Lactic acid, **esters** with **fatty**  
**acids** 57-55-6D, Propylene glycol, **esters** with  
**fatty acids** 1406-18-4D, Vitamin E, ethoxylated derivs.  
7664-38-2D, Phosphoric acid, alkyl esters, biological studies  
7664-93-9D, Sulfuric acid, alkyl and alkenyl esters, biological studies  
12441-09-7D, **Sorbitan**, **esters** with **fatty**  
**acids** 25322-68-3D, **PEG**, derivs. 25618-55-7D,  
**Polyglycerol**, **esters** with **fatty acids**  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)

(coemulsifiers; use of nanodispersions in cosmetic formulations)

IT **1338-43-8**, **Sorbitan** monooleate  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(coemulsifier; use of nanodispersions in cosmetic formulations)

L68 ANSWER 18 OF 57 HCA COPYRIGHT 2004 ACS on STN

131:285707 **Emulsifier dispersion compositions**  
for beverages.. Nakamura, Shingo; Muratsubaki, Yasutaka (Daiichi Kogyo  
Seiyaku Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11290040 A2  
**19991026** Heisei, 5 pp. (Japanese). CODEN: JKXXAF. APPLICATION:  
JP 1998-102575 19980414.

AB The invention relates to an **emulsifier dispersion**  
composition, suitable for use in a beverage, especially a beverage containing  
CaCO<sub>3</sub>,

wherein the composition is obtained by drying a solution or **dispersion**  
containing sucrose **fatty acid ester** having HLB  
of  $\geq 11$  and saccharides. A dried **emulsifier**  
**dispersion** composition was prepared from a sucrose **fatty**  
**acid ester** having HLB = 15 35, lecithin powder 15,  
dextrin 55, and water 30 kg. The dried composition 4.2 kg was combined with  
water 23,3 kg and CaCO<sub>3</sub> slurry 30 kg. and homogenized. The obtained CaCO<sub>3</sub>  
**dispersion** showed no ppts. during storage for 8 wk.

IC ICM A23L002-62

ICS A23L002-52; A23L002-44

CC 17-6 (Food and Feed Chemistry)

ST **emulsifier dispersion** compn beverage **fatty**  
**acid ester**

IT Lecithins

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(**emulsifier dispersion** compns. containing sucrose  
**fatty acid esters** and saccharides and  
lecithins for beverages)

IT Beverages

**Emulsifying agents**

Food additives

(**emulsifier dispersion** compns. containing sucrose  
**fatty acid esters** and saccharides for

- beverages)
- IT Carbohydrates, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**emulsifier dispersion** compns. containing sucrose  
**fatty acid esters** and saccharides for  
beverages)
- IT **Fatty acids**, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**esters; emulsifier dispersion** compns.  
containing, for beverages)
- IT **56-81-5D, Glycerin, fatty acid esters**  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**emulsifier dispersion** compns. containing sucrose  
**fatty acid esters** and saccharides and  
glycerin **fatty acid esters** for beverages)
- IT 25618-55-7D, Polyglycerine, **fatty acid esters**  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**emulsifier dispersion** compns. containing sucrose  
**fatty acid esters** and saccharides and  
polyglycerin **fatty acid esters** for  
beverages)
- IT 12441-09-7D, **Sorbitan, fatty acid esters**  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**emulsifier dispersion** compns. containing sucrose  
**fatty acid esters** and saccharides and  
**sorbitan fatty acid esters** for  
beverages)
- IT **50-70-4, Sorbitol, biological studies** 50-99-7, Glucose,  
biological studies 57-50-1, Sucrose, biological studies 57-50-1D,  
Sucrose, **fatty acid esters** 9004-53-9,  
Dextrin  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**emulsifier dispersion** compns. containing sucrose  
**fatty acid esters** and saccharides for  
beverages)
- IT 471-34-1, Calcium carbonate, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**emulsifier dispersion** compns. containing sucrose  
**fatty acid esters** and saccharides for  
beverages containing)
- IT **56-81-5D, Glycerin, fatty acid esters**  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**emulsifier dispersion** compns. containing sucrose  
**fatty acid esters** and saccharides and  
glycerin **fatty acid esters** for beverages)
- IT **50-70-4, Sorbitol, biological studies**  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**emulsifier dispersion** compns. containing sucrose  
**fatty acid esters** and saccharides for  
beverages)

L68 ANSWER 19 OF 57 HCA COPYRIGHT 2004 ACS on STN

128:294216 Foaming **emulsified oil compositions** for cakes  
with good volume and taste. Fujimura, Masaki; Hashimoto, Shinichi; Kato,  
Shoichi (Kanegafuchi Chemical Industry Co., Ltd., Japan). Jpn. Kokai  
Tokkyo Koho JP 10088184 A2 **19980407** Heisei, 9 pp. (Japanese).  
CODEN: JKXXAF. APPLICATION: JP 1996-245813 19960918.

AB The oil-in-water compns. contains 0.2-3 parts processed chicken egg and 0.03-3 parts (based on 100 parts total compns.) milk protein. A composition contained an oil phase containing rapeseed oil 20, **glycerol monostearate** 5, PG behenic acid **ester** 5.2 and **sorbitan fatty acid monoester** 2.8 part and an aqueous phase containing water 20, 70% sorbitol 40, **fatty acid sugar monoester** 40, enzyme-treated egg 3.0, and enzyme-decomposed casein 0.2 part.

IC ICM C11C003-00  
ICS A21D013-08; A23D007-00; A23J003-10; A23J003-34; A23L001-19; A23L001-32

CC 17-9 (Food and Feed Chemistry)

ST foaming **emulsified** oil compn cake; egg foaming **emulsified** oil cake; milk protein **emulsified** oil cake

IT Bakery products  
(cakes; oil-in-water foaming **emulsified** oil compns. for cakes with good volume and taste)

IT Proteins, general, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(milk; oil-in-water foaming **emulsified** oil compns. for cakes with good volume and taste)

IT Caseins, biological studies  
Rape oil  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(oil-in-water foaming **emulsified** oil compns. for cakes with good volume and taste)

IT **Emulsions**  
(oil-in-water; oil-in-water foaming **emulsified** oil compns. for cakes with good volume and taste)

IT Egg, poultry  
(processed; oil-in-water foaming **emulsified** oil compns. for cakes with good volume and taste)

IT Caseins, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(sodium complexes; oil-in-water foaming **emulsified** oil compns. for cakes with good volume and taste)

IT Proteins, specific or class  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(whey; oil-in-water foaming **emulsified** oil compns. for cakes with good volume and taste)

L68 ANSWER 20 OF 57 HCA COPYRIGHT 2004 ACS on STN  
128:270002 Mineral **composition** containing lecithins exhibits improved **dispersibility** in aqueous phase. Nanbu, Hironobu; Nakata, Katsuyasu; Sakaguchi, Noboru; Yamazaki, Yoshifumi (Taiyo Kagaku Co., Ltd., Japan). PCT Int. Appl. WO 9814072 A1 **19980409**, 38 pp. DESIGNATED STATES: W: AU, CA, CN, JP, KR, US; RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (Japanese). CODEN: PIXXD2. APPLICATION: WO 1997-JP3540 19971002. PRIORITY: JP 1996-283018 19961003; JP 1997-54134 19970221.

AB Disclosed is a mineral composition containing enzymically digested lecithins and,  
optionally, a non-ionic surfactant to improve the mineral **dispersibility** without the need to add large amount of cellulose, oils, etc. The composition also improves in vivo absorption of the minerals and poses minimal stimulation to the digestive tracts. Thus, a tetrasodium pyrophosphate solution is reacted with a mixture solution containing

FeCl<sub>3</sub>·6H<sub>2</sub>O and Sunlecithin (enzyme-digested lecithins; by Taiyo Chemical Co.) to obtain ferric pyrophosphate-lecithins complex, from which a 10% ferric pyrophosphate slurry in water was prepared. Precipitation of the 10% ferric pyrophosphate slurry 100 g suspended in 900 g milk was not seen even after storage for 500 h. The excellent **dispersibility** of the composition allows its applicability in wide fields such as foods and cosmetic industries.

- IC ICM A23L001-304  
ICS A61K031-685; A61K033-00; A61K033-26; A61K033-10; A61K033-06
- CC 18-1 (Animal Nutrition)  
Section cross-reference(s): 17, 62
- ST lecithin mineral compn **dispersibility**; iron pyrophosphate  
lecithin milk **dispersibility**; food cosmetic mineral compn  
lecithin
- IT Lysophosphatides  
RL: BPN (Biosynthetic preparation); FFD (Food or feed use); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(lysophosphatidylglycerols; mineral composition containing lecithins  
exhibits improved **dispersibility** in aqueous phase)
- IT Lysophosphatidylcholines  
Lysophosphatidylethanolamines  
Lysophosphatidylinositols  
Lysophosphatidylserines  
Phosphatidic acids  
Phosphatidylglycerols  
RL: BPN (Biosynthetic preparation); FFD (Food or feed use); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(mineral composition containing lecithins exhibits improved  
**dispersibility** in aqueous phase)
- IT Lecithins  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(mineral composition containing lecithins exhibits improved  
**dispersibility** in aqueous phase)
- IT Minerals, biological studies  
RL: FFD (Food or feed use); PNU (Preparation, unclassified); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(mineral composition containing lecithins exhibits improved  
**dispersibility** in aqueous phase)
- IT Surfactants  
RL: NUU (Other use, unclassified); USES (Uses)  
(nonionic, mineral **dispersibility** improved by; mineral composition  
containing lecithins exhibits improved **dispersibility** in aqueous  
phase)
- IT 9001-84-7, Phospholipase A  
RL: CAT (Catalyst use); NUU (Other use, unclassified); USES (Uses)  
(lecithins digested with; mineral composition containing lecithins exhibits  
improved **dispersibility** in aqueous phase)
- IT 9001-87-0, Phospholipase D  
RL: CAT (Catalyst use); NUU (Other use, unclassified); USES (Uses)  
(mineral composition containing lecithins exhibits improved  
**dispersibility** in aqueous phase)
- IT 471-34-1, Calcium carbonate, biological studies 10086-45-0, Calcium  
pyrophosphate 10103-46-5, Calcium phosphate 205537-92-4, Sunlecithin L  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(mineral composition containing lecithins exhibits improved  
**dispersibility** in aqueous phase)
- IT 56-81-5D, 1,2,3-Propanetriol, fatty

acid ester, uses 57-50-1D, fatty  
acid ester 57-55-6D, 1,2-Propanediol,  
fatty acid ester, uses 12441-09-7D,  
Sorbitan, fatty acid ester  
25618-55-7D, Polyglycerin, fatty acid ester  
205537-70-8, Sunsoft A 12E  
RL: NUU (Other use, unclassified); USES (Uses)  
(mineral composition containing lecithins exhibits improved  
dispersibility in aqueous phase)

IT 7722-88-5, Tetrasodium pyrophosphate 10025-77-1, Iron chloride (FeCl<sub>3</sub>)  
hexahydrate  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(mineral composition containing lecithins exhibits improved  
dispersibility in aqueous phase)

IT 10058-44-3, Ferric pyrophosphate  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(water-insol. mineral; mineral composition containing lecithins exhibits  
improved dispersibility in aqueous phase)

IT 56-81-5D, 1,2,3-Propanetriol, fatty  
acid ester, uses  
RL: NUU (Other use, unclassified); USES (Uses)  
(mineral composition containing lecithins exhibits improved  
dispersibility in aqueous phase)

L68 ANSWER 21 OF 57 HCA COPYRIGHT 2004 ACS on STN  
128:60922 A cellulose **composition**, its preparation, and its use in  
foods. McGinley, Emanuel J.; Krawczyk, Gregory R. (FMC Corporation, USA).  
PCT Int. Appl. WO 9745024 A1 **19971204**, 74 pp. DESIGNATED  
STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,  
DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK,  
LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,  
SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, AM, AZ, BY, KG, KZ,  
MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI,  
FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG.  
(English). CODEN: PIXXD2. APPLICATION: WO 1997-US9015 19970527.  
PRIORITY: US 1996-683513 19960528.

AB Disclosed is an invention directed to a cellulose composition used as a  
texturizing, thickening, stabilizing, gelling or bulking agent for  
aqueous-based food systems comprising a combination of: (1) a finely divided  
cellulose component and (2) a surfactant component comprising one or more  
surfactants, in powder aggregate form; and the use of this agent in  
reduced fat foods; and the method of making the agent.

IC ICM A23L001-0534  
CC 17-6 (Food and Feed Chemistry)  
IT Diglycerides  
Lecithins  
**Monoglycerides**  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); FFD (Food or feed use); PEP (Physical, engineering  
or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)  
(cellulose composition, its preparation, and its use in foods)

IT Meat  
(emulsified; cellulose composition, its preparation, and its use in  
foods)

IT Diglycerides  
**Monoglycerides**  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); FFD (Food or feed use); PEP (Physical, engineering

or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)  
(esters; cellulose composition, its preparation, and its use in foods)

IT **Monoglycerides**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)  
(ethoxylated; cellulose composition, its preparation, and its use in foods)

IT **Monoglycerides**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)  
(palm-oil; cellulose composition, its preparation, and its use in foods)

IT **Monoglycerides**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)  
(sunflower-oil; cellulose composition, its preparation, and its use in

foods)

IT 50-21-5D, Lactic acid, mono or diglyceride ester deriv 57-11-4D,  
**Octadecanoic acid, ester deriv**, biological studies  
57-50-1D, ester deriv 57-55-6D, 1,2-**Propanediol, ester**  
deriv, biological studies 64-19-7D, Acetic acid, mono or diglyceride  
ester deriv, biological studies 110-15-6D, Butanedioic acid, mono or  
diglyceride ester deriv, biological studies 1323-39-3, Myverol P 06  
1338-41-6, Polycon S60K 9004-34-6, Cellulose, biological studies  
9005-66-7, Durfax 60 12441-09-7D, **Sorbitan**, ester deriv  
25383-99-7, **Emulsilac SK** 25618-55-7D, **Polyglycerol**,  
**fatty acid ester deriv** 34344-66-6D,  
Polysorbic acid, ester deriv 51591-38-9D, Diacetyltartaric acid, mono or  
diglyceride ester deriv 58740-44-6, Myverol SMG 93907-32-5, Myvatex  
Texture Light 100843-08-1, Kaomel 113355-71-8, Panodan 150  
115536-98-6, Ryoto Sugar Ester ER 290 123759-95-5, Triodan R 90  
200414-99-9, Atmul 84K 200415-06-1, Myvatex Mighty Soft 200415-11-8,  
Lactodan P 22K  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)  
(cellulose composition, its preparation, and its use in foods)

L68 ANSWER 22 OF 57 HCA COPYRIGHT 2004 ACS on STN

127:267829 Color cosmetic **composition** containing alcohol modified  
wax. Rokitowski, Karen Lee (Unilever Plc, UK; Unilever N.V.). Eur. Pat.  
Appl. EP 795312 A1 **19970917**, 14 pp. DESIGNATED STATES: R: CH,  
DE, ES, FR, GB, IT, LI, NL, SE. (English). CODEN: EPXXDW. APPLICATION:  
EP 1997-301498 19970305. PRIORITY: US 1996-616793 19960315; US  
1997-795096 19970205.

AB A color mascara composition comprising from about 1 to about 99 weight% of a  
natural wax modified with a C20-C40 alkanol to substantially  
**esterify C12-C60 free fatty acids** of the wax  
to form an **esterified** wax; from about 0.001 to about 20 weight% of  
a colorant; and an effective of a pharmaceutically acceptable carrier. A  
mascara contained behenyl beeswax 17.4, deionized water 52.5, hydroxyethyl  
cellulose 1.0, iron oxide 8.1, Me paraben and Pr paraben 0.5,  
triethanolamine 1.5, isostearic acid 1.0, stearic acid 2.0, glyceryl  
stearate 0.6, **PEG-20 sorbitan** beeswax 1.5, talc 0.90,  
urea 0.2, panthenol 0.05, acrylate copolymer 3.5, dimethicone copolymer  
0.3, EDTA 0.1, carnauba wax 3.15, PVP 1.0, Pecogel H-12 4.0, and  
polyhydroxystearic acid 1.00%.



IC ICM A61K007-032  
CC 62-4 (Essential Oils and Cosmetics)  
ST color cosmetic alc **fatty acid** wax; mascara behenyl  
beeswax iron oxide  
IT **Fatty acids**, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(C12-60; color cosmetic composition containing alc. modified wax)  
IT Beeswax  
**Emulsifying agents**  
Thickening agents  
(color cosmetic composition containing alc. modified wax)  
IT **56-81-5D, 1,2,3-Propanetriol, esters**  
102-71-6, biological studies 1308-38-9, Chromium oxide (Cr2O3),  
biological studies 1332-37-2, Iron oxide, biological studies  
1390-65-4, Carmine 9003-39-8 10101-66-3 12001-99-9, C.I. Pigment  
Green 18 12769-96-9, C.I. Pigment Violet 15 13463-67-7, Titanium oxide  
(TiO2), biological studies 25869-00-5 57455-37-5, C.I. Pigment Blue 29  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(color cosmetic composition containing alc. modified wax)  
IT **56-81-5D, 1,2,3-Propanetriol, esters**  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(color cosmetic composition containing alc. modified wax)

L68 ANSWER 23 OF 57 HCA COPYRIGHT 2004 ACS on STN

127:160960 Starch-**emulsifier** composition and manuf.

methods. Yuan, Chienkuo Ronnie (Opta Food Ingredients, Inc., USA; Yuan,  
Chienkuo Ronnie). PCT Int. Appl. WO 9726296 A1 **19970724**, 41 pp.

DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN,  
CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ,  
LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO,  
RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK,  
ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD,  
TG. (English). CODEN: PIXXD2. APPLICATION: WO 1997-US354 19970115.  
PRIORITY: US 1996-10061 19960116.

AB A method of producing starch-**emulsifier** compns. comprises  
heating a starch in the presence of an **emulsifier** to form a  
complex with unique properties. The product can be further treated to  
obtain greater than about 20 % short chain amylose. Starch-  
**emulsifier** compns. (e.g., powders, gels, pastes) produced by this  
method and food products containing the starch-**emulsifier** composition are  
also described.

IC ICM C08L003-02

ICS C08B030-14; A23L001-00; A23L002-00

CC 17-6 (Food and Feed Chemistry)

ST starch **emulsifier** manuf food

IT Cheese

(Cream; starch-**emulsifier** composition and manufacture methods)

IT Bakery products

(brownies; starch-**emulsifier** composition and manufacture methods)

IT Bakery products

Bakery products

(cakes, low-calorie; starch-**emulsifier** composition and manufacture  
methods)

IT Bakery products

(cakes; starch-**emulsifier** composition and manufacture methods)

IT Bakery products  
(cookies; starch-**emulsifier** composition and manufacture methods)

IT Bakery products  
(crackers; starch-**emulsifier** composition and manufacture methods)

IT Enzymes, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(debranching enzymes; starch-**emulsifier** composition and manufacture methods)

IT Food  
(dietetic; starch-**emulsifier** composition and manufacture methods)

IT Food  
(dips; starch-**emulsifier** composition and manufacture methods)

IT Confectionery  
(fudge; starch-**emulsifier** composition and manufacture methods)

IT Bakery products  
(graham crackers; starch-**emulsifier** composition and manufacture methods)

IT Chocolate  
Chocolate  
(low-calorie, spreads; starch-**emulsifier** composition and manufacture methods)

IT Food  
Ice cream  
Ice cream  
Mayonnaise  
(low-calorie; starch-**emulsifier** composition and manufacture methods)

IT Bakery products  
(pies; starch-**emulsifier** composition and manufacture methods)

IT Bakery products  
(pretzels; starch-**emulsifier** composition and manufacture methods)

IT Food  
(snack; starch-**emulsifier** composition and manufacture methods)

IT Cream  
(sour; starch-**emulsifier** composition and manufacture methods)

IT Food  
(spreads; starch-**emulsifier** composition and manufacture methods)

IT Bakery products  
Bread  
Candy  
Cheese  
Confectionery  
Cooking  
Dairy products  
Emulsifying agents  
Food  
Food functional properties  
Food gels  
Food rheology  
Food viscosity  
Frozen desserts  
Ice cream  
Margarine  
Mayonnaise  
Milk  
Pasta  
Peanut butter  
Puddings  
Sauces (condiments)

(starch-**emulsifier** composition and manufacture methods)

IT **Monoglycerides**  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(starch-**emulsifier** composition and manufacture methods)

IT Milk preparations  
(yogurt; starch-**emulsifier** composition and manufacture methods)

IT 9075-68-7, Pullulanase  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(Promozyme 200 L; starch-**emulsifier** composition and manufacture methods)

IT 9005-25-8, Starch, biological studies 9037-22-3, Amylopectin  
RL: BPR (Biological process); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); PROC (Process); USES (Uses)  
(starch-**emulsifier** composition and manufacture methods)

IT 9005-82-7, Amylose  
RL: BSU (Biological study, unclassified); FFD (Food or feed use); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); USES (Uses)  
(starch-**emulsifier** composition and manufacture methods)

IT 57-50-1D, **fatty acid esters** 57-55-6D, 1,2-**Propanediol, esters**, biological studies 5793-94-2, Calcium stearoyl lactylate 9000-01-5, Gum arabic 9000-07-1, Carrageenan 9000-30-0, Guar gum 9000-40-2, Locust bean gum 9000-92-4, Amylase 9004-32-4 9004-34-6, Cellulose, biological studies 9004-67-5, Methylcellulose 9004-81-3, Polyethylene glycol monolaurate 9005-32-7, Alginic acid 9005-67-8, Polyoxyethylene **sorbitan** monostearate 11121-34-9, Myverol 11138-66-2, Xanthan gum 12441-09-7D, **Sorbitan**, esters 25168-73-4, Sucrose monostearate 25383-99-7, Sodium stearoyl-2-lactylate 26446-38-8, Sucrose monopalmitate 31566-31-1, Glyceryl monostearate 34344-66-6D, Polysorbic acid, salts 51591-38-9D, Diacetyl tartaric acid, **monoglyceride** esters  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(starch-**emulsifier** composition and manufacture methods)

L68 ANSWER 24 OF 57 HCA COPYRIGHT 2004 ACS on STN  
126:329876 Correction of: 126:224529 A **fatty acid esters composition** of a polyglycerin, a process for the preparation thereof, a process for the preparation of a highly-purified **fatty esters composition** of a polyglycerin, a highly-purified **fatty esters composition** of a polyglycerin, an additive for food-stuffs, a resin **composition**, and a **composition** for cosmetics or detergents. Endo, Toshio; Daito, Terumasa (Japan). Eur. Pat. Appl. EP 758641 A1 **19970219**, 96 pp. DESIGNATED STATES: R: DE, FR, GB. (English). CODEN: EPXXDW. APPLICATION: EP 1996-400562 19960318. PRIORITY: JP 1995-227073 19950811; JP 1995-233180 19950821; JP 1995-344844 19951206; JP 1996-6743 19960118; JP 1996-8372 19960122; JP 1996-8373 19960122; JP 1996-10831 19960125; JP 1996-10832 19960125; JP 1996-16343 19960201; JP 1996-16344 19960201; JP 1996-16345 19960201; JP 1996-18579 19960205; JP 1996-18580 19960205; JP 1996-18581 19960205; JP 1996-22642 19960208; JP 1996-22643 19960208; JP 1996-22644 19960208; JP 1996-22645 19960208.

AB Disclosed are a **fatty acid ester composition** of a polyglycerin containing more than 70% of **fatty acid monoester** which is defined by a specified anal. method, a process for the preparation thereof, a process for the preparation of a highly-purified **fatty acid ester composition** of a polyglycerin, and a highly-purified **fatty acid composition** of a polyglycerin

having an oxirane oxygen concentration of below 100 ppm which is defined by a specified anal. method. The **fatty acid esters** of a polyglycerin are useful as additives for a variety of food-stuffs, additives for a variety of thermoplastic resins, and as additives for a variety of cosmetics or detergents.

- IC ICM C07C069-33
- ICS C07C067-26; A61K007-00; C08K005-103; C11D001-66; A23L001-03
- CC 17-9 (Food and Feed Chemistry)  
Section cross-reference(s): 46, 62, 63
- IT Agglomeration  
(agents; **fatty acid ester** composition of a polyglycerin)
- IT Cocoa products  
Coffee products  
Tea products  
(beverages; **fatty acid ester** composition of a polyglycerin)
- IT Bakery products  
(cakes; **fatty acid ester** composition of a polyglycerin)
- IT Bakery products  
(cookies; **fatty acid ester** composition of a polyglycerin)
- IT Anti-inflammatory agents  
Beeswax  
Bread  
Butter  
Cheese  
Coloring materials  
Cosmetics  
Dairy products  
Dentifrices  
Detergents  
Disks  
Fish  
Foaming agents  
Magnetic tapes  
Meat  
Pasta  
Perfumes  
Thickening agents  
Viscosity  
Wetting agents  
(**fatty acid ester** composition of a polyglycerin)
- IT Fats and Glyceridic oils, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**fatty acid ester** composition of a polyglycerin)
- IT Bentonite, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(**fatty acid ester** composition of a polyglycerin)
- IT Enzymes, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(**fatty acid ester** composition of a polyglycerin)
- IT Silicates, uses

RL: MOA (Modifier or additive use); USES (Uses)  
(**fatty acid ester** composition of a polyglycerin)

IT Zeolites (synthetic), uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(**fatty acid ester** composition of a polyglycerin)

IT Polyoxyalkylenes, uses  
RL: POF (Polymer in formulation); USES (Uses)  
(**fatty acid ester** composition of a polyglycerin)

IT Alkali metal hydroxides  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(**fatty acid ester** composition of a polyglycerin)

IT Alkaline earth hydroxides  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(**fatty acid ester** composition of a polyglycerin)

IT **Fatty acids**, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(**fatty acid ester** composition of a polyglycerin)

IT Lanolin  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**fatty acid ester** composition of a polyglycerin)

IT Olive oil  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**fatty acid ester** composition of a polyglycerin)

IT Paraffin waxes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**fatty acid ester** composition of a polyglycerin)

IT Petrolatum  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**fatty acid ester** composition of a polyglycerin)

IT Polysiloxanes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**fatty acid ester** composition of a polyglycerin)

IT Waxes  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**fatty acid ester** composition of a polyglycerin)

IT Amines, uses  
RL: POF (Polymer in formulation); USES (Uses)  
(hindered; **fatty acid ester** composition of a polyglycerin)

IT Jets  
Nozzles  
(jet nozzles, ink; **fatty acid ester** composition of a polyglycerin)

IT Acetals  
RL: POF (Polymer in formulation); USES (Uses)  
(polymers; **fatty acid ester** composition of a

- polyglycerin)
- IT Carboxylic acids, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(salt deriv; **fatty acid ester** composition of a polyglycerin)
- IT Plastics, uses  
RL: POF (Polymer in formulation); USES (Uses)  
(thermoplastics; **fatty acid ester** composition of a polyglycerin)
- IT Fats and Glyceridic oils, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(vegetable; **fatty acid ester** composition of a polyglycerin)
- IT **Emulsions**  
(water-in-oil; **fatty acid ester** composition of a polyglycerin)
- IT 7664-38-2D, Phosphoric acid, **ester** derivs, uses  
RL: CAT (Catalyst use); USES (Uses)  
(**fatty acid ester** composition of a polyglycerin)
- IT 34406-66-1, Sunsoft Q 12S 71012-10-7 74504-64-6 79665-93-3  
125622-15-3, Poem J 0021 149175-65-5, Poem J 6021 188132-58-3, Unigly  
GO 106  
RL: FFD (Food or feed use); MOA (Modifier or additive use); THU  
(Therapeutic use); BIOL (Biological study); USES (Uses)  
(**fatty acid ester** composition of a polyglycerin)
- IT 25618-55-7D, Polyglycerin, monofatty **acid ester** deriv  
34406-66-1, Decaglycerin monolaurate 51033-38-6, Hexaglycerin  
monolaurate 75719-57-2, Octaglycerol monostearate 79777-30-3,  
Decaglycerol monostearate 163633-72-5  
RL: FFD (Food or feed use); NUU (Other use, unclassified); POF (Polymer in  
formulation); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(**fatty acid ester** composition of a polyglycerin)
- IT 64-17-5, Ethanol, uses 67-63-0, 2-Propanol, uses 68-04-2, Sodium  
citrate 71-23-8, 1-Propanol, uses 112-53-8, Lauryl alcohol 112-72-1,  
Myristyl alcohol 112-92-5, Stearyl alcohol 143-28-2, Oleyl alcohol  
471-34-1, Calcium carbonate, uses 497-19-8, Sodium carbonate, uses  
661-19-8, Behenyl alcohol 676-46-0, Sodium malate 5064-31-3  
7487-88-9, Magnesium sulfate, uses 7647-14-5, Sodium chloride, uses  
7722-88-5 7757-82-6, Sodium sulfate, uses 7758-29-4, Sodium  
tripolyphosphate 7758-87-4, Calcium phosphate 7789-77-7, Calcium  
phosphate dihydrate 9003-04-7, Sodium polyacrylate 9004-32-4, Sodium  
carboxymethyl cellulose 9005-38-3, Sodium alginate 10043-52-4, Calcium  
chloride, uses 28874-51-3 36653-82-4, Cetyl alcohol 50813-16-6,  
Sodium metaphosphate  
RL: MOA (Modifier or additive use); USES (Uses)  
(**fatty acid ester** composition of a polyglycerin)
- IT 77-92-9, Citric **acid**, uses 87-69-4, Tartaric **acid**,  
uses 110-15-6, Succinic **acid**, uses 110-16-7, Maleic  
**acid**, uses 110-94-1, Glutaric **acid** 124-04-9, Adipic  
**acid**, uses 6915-15-7, Malic **acid** 51591-38-9,  
Diacetyltartaric **acid**  
RL: NUU (Other use, unclassified); USES (Uses)  
(**fatty acid ester** composition of a polyglycerin)

- IT 115-77-5, Pentaerythritol, uses 9002-86-2, Polyvinylchloride  
9003-53-6, Polystyrene 25034-86-0, Methylmethacrylate styrene copolymer  
25213-88-1, Acrylonitrile methylmethacrylate styrene copolymer 27233-87-  
0, Methylacrylate methylmethacrylate styrene copolymer 118570-01-7  
RL: POF (Polymer in formulation); USES (Uses)  
(**fatty acid ester** composition of a  
polyglycerin)
- IT 57-11-4, Stearic acid, reactions 143-07-7, Lauric acid  
, reactions 556-52-5, Glycidol  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(**fatty acid ester** composition of a  
polyglycerin)
- IT 50-70-4, Sorbitol, uses 50-99-7, D-Glucose, uses 56-81-5  
, Glycerin, uses 57-50-1, Saccharose, uses 57-55-6, Propylene glycol,  
uses 77-99-6, Trimethylol propane 107-88-0, 1,3-Butanediol  
110-27-0, Isopropyl myristate 111-02-4, Squalene 111-46-6, Diethylene  
glycol, uses 149-32-6, Erythritol 538-23-8, Trioctanoin 585-88-6,  
Maltitol 621-71-6, Tricaprin 2568-33-4, Isopreneglycol 7360-38-5  
12441-09-7, Sorbitan 12441-09-7D, Sorbitan,  
**fatty acid esters** 25265-71-8, Dipropylene  
glycol 25322-68-3, Polyethylene glycol 25322-68-3D, alkyl ether deriv  
25322-68-3D, alkylphenyl ether 25322-68-3D, **sorbitan** deriv  
29710-31-4, Cetyl octanoate 59113-36-9, Diglycerin  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**fatty acid ester** composition of a  
polyglycerin)
- IT 13463-67-7, Titanium dioxide, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(fibrous; **fatty acid ester** composition of a  
polyglycerin)
- IT 50-70-4, Sorbitol, uses 56-81-5, Glycerin, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**fatty acid ester** composition of a  
polyglycerin)

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126:224529 A **fatty acid esters**

**composition** of a polyglycerin, a process for the preparation  
thereof, a process for the preparation of a highly-purified **fatty**  
**esters composition** of a polyglycerin, a highly-purified  
**fatty esters composition** of a polyglycerin, an  
additive for food-stuffs, a resin **composition**, and a  
**composition** for cosmetics or detergents. (Japan). Eur. Pat. Appl.  
EP 758641 A1 **19970219**, 96 pp. DESIGNATED STATES: R: DE, FR,  
GB. (English). CODEN: EPXXDW. APPLICATION: EP 1996-400562 19960318.  
PRIORITY: JP 1995-227073 19950811; JP 1995-233180 19950821; JP 1995-344844  
19951206; JP 1996-6743 19960118; JP 1996-8372 19960122; JP 1996-8373  
19960122; JP 1996-10831 19960125; JP 1996-10832 19960125; JP 1996-16343  
19960201; JP 1996-16344 19960201; JP 1996-16345 19960201; JP 1996-18579  
19960205; JP 1996-18580 19960205; JP 1996-18581 19960205; JP 1996-22642  
19960208; JP 1996-22643 19960208; JP 1996-22644 19960208; JP 1996-22645  
19960208.

AB Disclosed are a **fatty acid ester** composition of a  
polyglycerin containing more than 70% of **fatty acid**  
**monoester** which is defined by a specified anal. method, a process  
for the preparation thereof, a process for the preparation of a highly-purified  
**fatty acid ester** composition of a polyglycerin, and  
a highly-purified **fatty acid** composition of a polyglycerin

having an oxirane oxygen concentration of below 100 ppm which is defined by a specified anal. method. The **fatty acid esters** of a polyglycerin are useful as additives for a variety of food-stuffs, additives for a variety of thermoplastic resins, and as additives for a variety of cosmetics or detergents.

- IC ICM C07C069-33
- ICS C07C067-26; A61K007-00; C08K005-103; C11D001-66; A23L001-03
- CC 17-9 (Food and Feed Chemistry)  
Section cross-reference(s): 62
- ST food **fatty acid ester** polyglycerin; cosmetic  
**fatty acid ester** polyglycerin; resin  
**fatty acid ester** polyglycerin; detergent  
**fatty acid ester** polyglycerin
- IT Cocoa products  
Coffee products  
Tea products  
(beverages; compns. of **fatty acid esters** of polyglycerins)
- IT Bakery products  
(cakes; compns. of **fatty acid esters** of polyglycerins)
- IT Bread  
Butter  
Cheese  
Cosmetics  
Dairy products  
Dentifrices  
Detergents  
Fish  
Foaming agents  
Pasta  
Wetting agents  
(compns. of **fatty acid esters** of polyglycerins)
- IT Fats and Glyceridic oils, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(compns. of **fatty acid esters** of polyglycerins)
- IT Zeolites (synthetic), uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(compns. of **fatty acid esters** of polyglycerins)
- IT **Fatty acids**, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(compns. of **fatty acid esters** of polyglycerins)
- IT Beeswax  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(compns. of **fatty acid esters** of polyglycerins)
- IT Bentonite, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(compns. of **fatty acid esters** of polyglycerins)
- IT Lanolin  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(compns. of **fatty acid esters** of polyglycerins)



- IT Olive oil  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(compns. of **fatty acid esters** of polyglycerins)
- IT Paraffin oils  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(compns. of **fatty acid esters** of polyglycerins)
- IT Silicates, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(compns. of **fatty acid esters** of polyglycerins)
- IT Bakery products  
(cookies; compns. of **fatty acid esters** of polyglycerins)
- IT Polyoxyalkylenes, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(**fatty acid ester** derivs; compns. of **fatty acid esters** of polyglycerins)
- IT Amines, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(hindered; compns. of **fatty acid esters** of polyglycerins)
- IT Cosmetics  
(lotions; compns. of **fatty acid esters** of polyglycerins)
- IT **Emulsions**  
(oil-in-water; compns. of **fatty acid esters** of polyglycerins)
- IT Acetals  
RL: FFD (Food or feed use); MOA (Modifier or additive use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(polymers; compns. of **fatty acid esters** of polyglycerins)
- IT Meat  
(processed; compns. of **fatty acid esters** of polyglycerins)
- IT Plastics, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(thermoplastics; compns. of **fatty acid esters** of polyglycerins)
- IT 104-15-4, uses 124-41-4, Sodium methylate 7664-38-2D, Phosphoric acid, **ester** derivs, uses  
RL: CAT (Catalyst use); USES (Uses)  
(compns. of **fatty acid esters** of polyglycerins)
- IT 115-77-5DP, **fatty acid ester** derivs  
9009-32-9P, **Polyglycerol** stearate 25618-55-7DP, Polyglycerin, **fatty acid esters** 34406-66-1P, Decaglycerol monolaurate 74504-64-6P, **Polyglycerol** laurate 75719-57-2P, Octaglycerin monostearate 163633-72-5P  
RL: FFD (Food or feed use); MOA (Modifier or additive use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(compns. of **fatty acid esters** of polyglycerins)
- IT 7360-38-5 34406-66-1, Sunsoft Q 12S 49553-76-6 51033-38-6,

SY-Glyster ML 500 54392-26-6, **Sorbitan** monoisostearate  
71012-10-7, SY-Glyster MO 310 75798-42-4, SY-Glyster ML 310  
79665-93-3, SY-Glyster MO 750 95461-65-7, SY-Glyster MS 500  
125622-15-3, Poem J 0021 149175-65-5, Poem J 6021 188132-58-3, Unigly  
GO 106

RL: FFD (Food or feed use); MOA (Modifier or additive use); THU  
(Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. of **fatty acid esters** of  
polyglycerins)

IT 64-17-5, Ethanol, uses 67-63-0, Isopropanol, uses 68-04-2, Sodium  
citrate 71-23-8, 1-Propanol, uses 77-92-9, Citric acid, uses  
87-69-4, uses 110-15-6, Butanedioic acid, uses 110-16-7, 2-Butenedioic  
acid (Z)-, uses 110-94-1, Pentanedioic acid 112-53-8,  
1-Dodecanol 112-72-1, Myristyl alcohol 112-92-5, 1-Octadecanol  
124-04-9, Hexanedioic acid, uses 143-28-2, Oleyl alcohol 497-19-8,  
Sodium carbonate, uses 661-19-8, Behenyl alcohol 676-46-0, Sodium  
malate 2082-80-6, Tristearyl phosphite 6915-15-7 7487-88-9,  
Magnesium sulfate, uses 7647-14-5, Sodium chloride (NaCl), uses  
7722-88-5 7757-82-6, Sodium sulfate, uses 7758-29-4, Sodium  
tripolyphosphate 9003-04-7, Sodium polyacrylate 10043-52-4, Calcium  
chloride, uses 36653-82-4, 1-Hexadecanol 51591-38-9

RL: MOA (Modifier or additive use); USES (Uses)

(compns. of **fatty acid esters** of  
polyglycerins)

IT 9002-86-2, Polyvinyl chloride 9003-53-6, Polystyrene 25034-86-0,  
Methylmethacrylate styrene copolymer 25035-81-8 25213-88-1,  
Acrylonitrile methylmethacrylate styrene copolymer 118570-01-7

RL: POF (Polymer in formulation); USES (Uses)

(compns. of **fatty acid esters** of  
polyglycerins)

IT 57-11-4, **Octadecanoic** acid, reactions 143-07-7, Dodecanoic  
acid, reactions 556-52-5, Oxiranemethanol

RL: RCT (Reactant); RACT (Reactant or reagent)

(compns. of **fatty acid esters** of  
polyglycerins)

IT 50-70-4, D-Glucitol, biological studies 50-99-7, D-Glucose,  
biological studies 56-81-5D, 1,2,3-**Propanetriol**,  
**fatty acid ester** derivs, biological studies  
57-50-1, Saccharose, biological studies 57-55-6, 1,2-**Propanediol**  
, biological studies 77-99-6 107-88-0, 1,3-**Butanediol**  
110-27-0, Isopropyl myristate 111-01-3, Squalane 111-46-6, biological  
studies 149-32-6 471-34-1, Calcium carbonate, biological studies  
538-23-8, Glycerin trioctanoate 585-88-6, Maltitol 621-71-6, Tricaprin  
2568-33-4, Isopreneglycol 7758-87-4, Calcium phosphate 7789-77-7,  
Calcium phosphate dihydrate 9004-32-4, Sodium carboxymethyl cellulose  
9005-38-3, Sodium alginate 12441-09-7D, **Sorbitan**,  
**fatty acid ester** derivs 25265-71-8,

Dipropylene glycol 25322-68-3D, **fatty acid**  
**ester** derivs 25618-55-7, Polyglycerin 28874-51-3 29710-31-4,

Cetyl octanoate 50813-16-6, Sodium meta-phosphate 59113-36-9,

Diglycerin 87390-32-7, Decaglyceryl monomyristate 145053-72-1

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. of **fatty acid esters** of  
polyglycerins)

IT 50-70-4, D-Glucitol, biological studies 56-81-5D, 1,2,3-

**Propanetriol**, **fatty acid ester**

derivs, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. of **fatty acid esters** of  
polyglycerins)

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126:170759 Oil-in-water-type foaming **emulsified** lipid  
**compositions** for foods. Oota, Hiroaki (Taiyo Oil & Fat Mfg. Co.,  
Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09010579 A2 19970114  
Heisei, 5 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-161624  
19950628.

AB The compns., especially useful in cake baking, contain **diesters** of  
C16-22 saturated **fatty acids** with propylene glycol (I) and  
edible fats/oils. Cake ingredients were whipped with an  
**emulsified** composition containing rapeseed oil, **fatty**  
**acid monoglyceride**, I **diesters** with  
**fatty acids**, I **monoesters** with **fatty**  
**acids**, **sorbitan fatty acid**  
**esters**, **sucrose fatty acid esters**,  
etc. and baked to give cake showing a fine texture.

IC ICM B01J013-00

ICS A21D013-08; A23D007-00; A23L001-19; A61K009-107; B01F017-00;  
B01F017-56

CC 17-9 (Food and Feed Chemistry)

ST propylene glycol fatty ester **emulsion** cake; edible oil  
**emulsion** fatty ester cake; rapeseed oil **emulsion** fatty  
ester cake; satd fatty ester oil food **emulsion**

IT **Fatty acids**, biological studies

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**esters**, C16-18, saturated, **esters** with  
**sorbitan**, glycerin, or sucrose; oil/water-type foaming  
**emulsions** containing edible fats/oils and saturated **fatty**  
**acid** propylene glycol **diesters**)

IT **Fatty acids**, biological studies

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**esters**, C16-22, saturated, **diesters** with propylene  
glycol; oil/water-type foaming **emulsions** containing edible  
fats/oils and saturated **fatty acid** propylene glycol  
**diesters**)

IT **Emulsifying agents**

Food **emulsions**

(oil/water-type foaming **emulsions** containing edible fats/oils and  
saturated **fatty acid** propylene glycol **diesters**  
)

IT Edible oils

**Monoglycerides**

Rape oil

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(oil/water-type foaming **emulsions** containing edible fats/oils and  
saturated **fatty acid** propylene glycol **diesters**  
)

IT Carboxylic acids, biological studies

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(salts; oil/water-type foaming **emulsions** containing edible  
fats/oils and saturated **fatty acid** propylene glycol  
**diesters**)

IT Bakery products

(sponge cakes; oil/water-type foaming **emulsions** containing edible  
fats/oils and saturated **fatty acid** propylene glycol  
**diesters**)

- IT 57-50-1D, Sucrose, **monoesters** with C16-18 saturated **fatty acid esters** 57-55-6D, 1,2-**Propanediol**, **diesters** with C16-22 saturated **fatty acids**, biological studies 68-04-2, Sodium citrate 12441-09-7D, **Sorbitan**, **monoesters** with C16-18 saturated **fatty acid esters**  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(oil/water-type foaming **emulsions** containing edible fats/oils and saturated **fatty acid** propylene glycol **diesters**)
- L68 ANSWER 27 OF 57 HCA COPYRIGHT 2004 ACS on STN  
125:299771 Food release **compositions** with organic fluidizing agents.  
Clapp, Clarence P.; Torrey, George S. (Creative Products Inc., USA). U.S. US 5567456 A **19961022**, 11 pp., Cont.-in-part of U.S. 5,374,434. (English). CODEN: USXXAM. APPLICATION: US 1994-270632 19940701. PRIORITY: US 1991-787193 19911104.
- AB A composition for facilitating the release of foods from cooking utensils contains an edible oil, lecithin, water and a carbonaceous, non-soap fluidizing agent. The water is present in an amount sufficient to partially, but not fully, hydrate the lecithin so as to render the partially hydrated lecithin insol. in the edible oil. The composition, which may further include a suitable normally gaseous propellant to discharge the composition from a conventional aerosol spray can, provides a substantially clear and smooth spray coating on cooking utensils at ambient temps., without the need for Et alc. in the composition The composition may optionally include conventional modifying agents such as suspending agents, antioxidants, preservatives or flavorants. The fluidizing agent is either a **glycerol ester** of a **fatty acid** or a free **fatty acid** material, and fluidizes the lecithin so that if the lecithin settles, it easily can be re-**dispersed** in the oil.
- IC ICM A23D009-00  
ICS A23J007-00
- NCL 426116000
- CC 17-4 (Food and Feed Chemistry)
- IT **Fatty acids**, biological studies  
Lecithins  
Phosphatides  
Phosphatidylethanolamines  
Phosphatidylinositols  
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)  
(food release compns. with organic fluidizing agents)
- IT 57-10-3, Palmitic acid, biological studies 57-11-4, Stearic acid, biological studies 60-33-3, Linoleic acid, biological studies **112-80-1**, Oleic acid, biological studies 143-07-7, Lauric acid, biological studies 544-63-8, Myristic acid, biological studies 9007-48-1, Polyglycerol oleate  
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)  
(food release compns. with organic fluidizing agents)
- IT **112-80-1**, Oleic acid, biological studies  
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)  
(food release compns. with organic fluidizing agents)

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- 124:287669 Aerosol-dispensable lecithin **composition** containing organic fluidizing agents to prevent sticking of food to cooking utensils. Clapp, Clarence P.; Torrey, George S. (USA). Can. Pat. Appl. CA 2128174 AA 19960116, 38 pp. (English). CODEN: CPXXEB. APPLICATION: CA 1994-2128174 19940715.
- AB A parting composition for facilitating the release of foodstuffs from cooling utensils contains an edible oil, lecithin, water, and a carbonaceous, non-soap fluidizing agent. The water is present in an amount sufficient to partially, but not fully, hydrate the lecithin so as to render the partially hydrated lecithin insol. in the edible oil. The composition, which may further include a suitable normally gaseous propellant to discharge the composition from a conventional aerosol spray can, provides a substantially clear and smooth spray coating on cooking utensils at ambient temps., without the need for EtOH in the composition. The composition may optionally include conventional modifying agents such as suspending agents, antioxidants, preservatives, flavorants, etc. The fluidizing agent, either a **glycerol ester** of a **fatty acid** or a free **fatty acid** material, fluidizes the lecithin so that if the lecithin settles, it can easily be re-dispersed in the oil.
- IC ICM A23J007-00  
ICS A23D009-00
- CC 17-6 (Food and Feed Chemistry)
- IT **Fatty acids**, biological studies  
Glycerides, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(fluidizing agent; aerosol-dispensable lecithin/edible oil composition containing organic fluidizing agents to prevent sticking of food to cooking utensils)
- IT **Fatty acids**, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(C12-20, fluidizing agent; aerosol-dispensable lecithin/edible oil composition containing organic fluidizing agents to prevent sticking of food to cooking utensils)
- IT **Fatty acids**, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(animal-oil, fluidizing agent; aerosol-dispensable lecithin/edible oil composition containing organic fluidizing agents to prevent sticking of food to cooking utensils)
- IT **Fatty acids**, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(coco, fluidizing agent; aerosol-dispensable lecithin/edible oil composition containing organic fluidizing agents to prevent sticking of food to cooking utensils)
- IT **Glycerides**, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(mono-, acetates, fluidizing agent; aerosol-dispensable lecithin/edible oil composition containing organic fluidizing agents to prevent sticking of food to cooking utensils)
- IT **Fatty acids**, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(soya, fluidizing agent; aerosol-dispensable lecithin/edible oil composition containing organic fluidizing agents to prevent sticking of food to cooking utensils)

IT **Fatty acids**, biological studies

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(vegetable-oil, fluidizing agent; aerosol-dispensable lecithin/edible oil composition containing organic fluidizing agents to prevent sticking of food to cooking utensils)

IT 57-10-3, Palmitic acid, biological studies 57-11-4, Octadecanoic acid, biological studies 60-33-3, 9,12-Octadecadienoic acid (Z,Z)-, biological studies **112-80-1**, Oleic acid, biological studies 143-07-7, Dodecanoic acid, biological studies 544-63-8, Myristic acid, biological studies 9007-48-1, Polyglycerol oleate 53168-42-6, Myvacet 9-45

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(fluidizing agent; aerosol-dispensable lecithin/edible oil composition containing organic fluidizing agents to prevent sticking of food to cooking utensils)

IT **112-80-1**, Oleic acid, biological studies

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(fluidizing agent; aerosol-dispensable lecithin/edible oil composition containing organic fluidizing agents to prevent sticking of food to cooking utensils)

L68 ANSWER 29 OF 57 HCA COPYRIGHT 2004 ACS on STN

124:174258 Food release **compositions** with organic fluidizing agents.

Clapp, Clarence P.; Torrey, George S. (Creative Products Inc., USA). PCT Int. Appl. WO 9601056 A1 **19960118**, 41 pp. DESIGNATED STATES: W: AU, CN, NO; RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1994-US9800 19940829. PRIORITY: US 1994-270632 19940701.

AB A parting composition for facilitating the release of foodstuffs from cooking utensils contains an edible oil, lecithin, water, a carbonaceous, non-soap fluidizing agent. The water is present in an amount sufficient to partially, but not fully, hydrate the lecithin so as to render the partially hydrated lecithin insol. in the edible oil. The composition, which may further include a suitable normally gaseous propellant to discharge the composition from a conventional aerosol spray can, provides a substantially clear and smooth spray coating on cooking utensils at ambient temps., without the need for Et alc. in the composition. The coating, which may be used in lieu of oils, grease, butter, etc. to lubricate the food-contacting surfaces of cooking utensils such as frying and baking pans, facilitates separation of the cooked foodstuffs from the cooking surfaces. The composition may

optionally include conventional modifying agents such as suspending agents, anti-oxidants, preservatives, flavors, etc. The fluidizing agent is either a **glycerol ester** of a **fatty acid** or a free **fatty acid** material, fluidizes the lecithin so that if the lecithin settles, it can easily be re-**dispersed** in the oil.

IC ICM A23D009-00

ICS A23J007-00

CC **17-9** (Food and Feed Chemistry)

IT Fats and Glyceridic oils

**Fatty acids**, biological studies

Lecithins

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(in food release compns. with organic fluidizing agents for cooking utensils)

IT 57-10-3, Palmitic acid, biological studies 57-11-4, Stearic acid, biological studies 60-33-3, Linoleic acid, biological studies

- 112-80-1, Oleic acid, biological studies 143-07-7, Lauric acid, biological studies 544-63-8, Myristic acid, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(in food release compns. with organic fluidizing agents for cooking utensils)
- IT 112-80-1, Oleic acid, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(in food release compns. with organic fluidizing agents for cooking utensils)
- L68 ANSWER 30 OF 57 HCA COPYRIGHT 2004 ACS on STN
- 121:17740 Eye liner cosmetics containing isoparaffins and Berlin blue and **dispersants**. Kirita, Kazuhisa; Chikatsune, Keizo (Mitsubishi Pencil K. K., Japan). Eur. Pat. Appl. EP 596465 A1 **19940511**, 12 pp. DESIGNATED STATES: R: DE, FR, IT. (English). CODEN: EPXXDW. APPLICATION: EP 1993-117800 19931103. PRIORITY: JP 1992-317976 19921104.
- AB Oily reservoir type eye liner cosmetics are disclosed which comprise, as essential components, 35-95 wt% of a light liquid iso-paraffin having 8-15 carbon atoms, 3-40 wt% of a Berlin blue having a particle diameter of 0.2  $\mu$ m or less, and 2-40 wt% of a **dispersant** which is a mixture of three components, each of which is selected from each of the three groups of (A) a betaine-based surface active agent or the like, (B) a polyoxyethylene-based nonionic surface active agent or the like, and (C) a lecithin or an N-acylamino acid. Aqueous Berlin blue **dispersion** 91.2, lauryldimethylaminoacetic acid betaine 8.8% were stirred for 60 min, then centrifuged and heated to obtain a **dispersant**-adsorbed powder containing 80.50% pigment. A cosmetic eye liner contained above powder 32.0, **sorbitan** sesquioleate 7.0, polyoxyethylene nonyl Ph ether 2.0, soybean phospholipid 4.0, light liquid iso-paraffin 55.0%.
- IC ICM A61K007-032  
ICS C09C001-26
- CC 62-4 (Essential Oils and Cosmetics)
- ST cosmetic eye liner isoparaffin **dispersant**; Berlin blue lauryldimethylaminoacetate betaine eye liner
- IT **Dispersing** agents  
Lecithins  
RL: BIOL (Biological study)  
(cosmetic eye liners containing isoparaffins and Berlin blue and)
- IT **Fatty acids**, biological studies  
RL: BIOL (Biological study)  
(**esters**, with **PEG**, cosmetic eye liners containing isoparaffins and Berlin blue and)
- IT Cosmetics  
(eye liners, isoparaffins and Berlin blue and **dispersants** in)
- IT Alkanes, biological studies  
RL: BIOL (Biological study)  
(iso-, cosmetic eye liners containing Berlin blue and **dispersants** and)
- IT **56-81-5D**, 1,2,3-**Propanetriol**, **fatty acid esters** 57-50-1D, Sucrose, **fatty acid esters** 683-10-3, Lauryldimethylaminoacetic acid betaine **1338-43-8**, **Sorbitan** monooleate 1462-54-0 7664-38-2D, Phosphoric acid, polyoxyethylene alkyl ethers 8007-43-0, **Sorbitan** sesquioleate 9004-81-3, Polyoxyethylene monolaurate 9004-95-9, Polyoxyethylene cetyl ether 9004-98-2, Polyoxyethylene oleyl ether 9004-99-3, Polyoxyethylene monostearate 9016-45-9, Polyoxyethylene nonyl phenyl ether 12441-09-7D, **Sorbitan**, **fatty acid esters** 25322-68-3D, **fatty**

- acid esters 26658-19-5, Sorbitan**  
tristearate 31566-31-1, Glycerin monostearate 37663-66-4  
RL: BIOL (Biological study)  
(cosmetic eye liners containing isoparaffins and Berlin blue and)
- IT 12240-15-2, Berlin blue  
RL: BIOL (Biological study)  
(cosmetic eye liners containing isoparaffins and **dispersants** and)
- IT 56-81-5D, 1,2,3-Propanetriol, **fatty**  
**acid esters 1338-43-8, Sorbitan**  
monooleate 26658-19-5, **Sorbitan** tristearate  
RL: BIOL (Biological study)  
(cosmetic eye liners containing isoparaffins and Berlin blue and)
- L68 ANSWER 31 OF 57 HCA COPYRIGHT 2004 ACS on STN  
120:268803 Fat substitute **compositions** having reduced laxative  
effects.. Meyer, Richard S.; Campbell, Michael L. (Curtice-Burns, Inc.,  
USA). U.S. US 5294451 A **19940315**, 11 pp. Cont.-in-part of U.S.  
Ser. No. 677,553, abandoned. (English). CODEN: USXXAM. APPLICATION: US  
1992-857063 19920324. PRIORITY: US 1991-677553 19910329.
- AB Antilaxative agents are included in fat substitute compns. to reduce or  
eliminate anal leakage in mammals of fat substitutes having a m.p.  
≤37°. The antilaxative agents are **emulsifiers**  
such as polyglyceryl **esters of fatty acids**,  
**mono- and di-glycerides**, microcryst.  
cellulose, ethoxylated **mono- and di-glycerides**  
**, sorbitan esters of fatty acids**,  
glyceryl-lacto **esters of fatty acids**,  
acetylated **monoglycerides**, polyglycerol lactic acid  
**ester**, and propylene glycol mono stearate, or gums such as xanthan  
gum. Addition of acetylated **monoglycerides** to sucrose  
**polyester** fat substitute inhibited anal leakage in rats fed this  
substitute.
- IC ICM A23D009-00  
NCL 426611000  
CC 17-9 (Food and Feed Chemistry)  
IT **Fatty acids, esters**  
RL: BIOL (Biological study)  
(C1-18, **esters**, antilaxative additives, to fat substitutes)
- IT **Glycerides, compounds**  
RL: BIOL (Biological study)  
(mixed **mono- and di-**, ethoxylated, antilaxative additives, to  
fat substitutes)
- IT **Glycerides, compounds**  
RL: BIOL (Biological study)  
(**mono-**, acetates, antilaxative additive, to fat substitutes)
- IT 1323-39-3, Propylene glycol monostearate 11138-66-2, Xanthan gum  
12441-09-7D, **Sorbitan, esters** with C1-18 **fatty**  
**acids** 146104-70-3  
RL: BIOL (Biological study)  
(antilaxative additive, to fat substitutes)
- L68 ANSWER 32 OF 57 HCA COPYRIGHT 2004 ACS on STN  
118:146587 **Suspensions** of micron-sized ascorbic acid particles and  
their use as antioxidants. Todd, Paul H., Jr. (Kalamazoo Holdings, Inc.,  
USA). PCT Int. Appl. WO 9300015 A1 **19930107**, 44 pp. DESIGNATED  
STATES: W: JP, KR; RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC,  
NL, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1992-US4874 19920610.  
PRIORITY: US 1991-717926 19910620.



- AB Particles of ascorbic acid with a diameter  $\leq 38 \mu\text{m}$  are used as an antioxidant for foods in which ascorbic acid is insol. (e.g. fats and oils). These particles are prepared by wet-milling of ascorbic acid in a solvent in which it is insol. The use of the powder to stabilize fats and glyceridic oils, paprika oleoresin, and chicken fat against oxidation is demonstrated.
- IC ICM A23B004-00
- CC 17-6 (Food and Feed Chemistry)  
Section cross-reference(s): 62
- IT **Glycerides**, uses  
RL: USES (Uses)  
(**di-**, in microparticulate ascorbic acid-containing antioxidants for fatty foods)
- IT **Fatty acids, esters**  
RL: BIOL (Biological study)  
(**esters**, with **sorbitan** and propylene glycol, in microparticulate ascorbic acid-containing antioxidants for **fatty foods**)
- IT **Glycerides**, uses  
RL: USES (Uses)  
(**mono-**, in microparticulate ascorbic acid-containing antioxidants for fatty foods)
- IT 50-21-5D, glycerides 77-92-9D, glycerides 87-69-4D, Tartaric acid, glycerides 1338-41-6, **Sorbitan** monostearate **1338-43-8**, **Sorbitan** monooleate 25496-72-4, Glycerol monooleate 25618-55-7D, **Polyglycerol, fatty acid esters** 26266-58-0, **Sorbitan** trioleate 75719-56-1, Octaglycerol monooleate 146599-38-4  
RL: BIOL (Biological study)  
(in microparticulate ascorbic acid-containing antioxidants for **fatty foods**)
- IT **1338-43-8, Sorbitan** monooleate  
RL: BIOL (Biological study)  
(in microparticulate ascorbic acid-containing antioxidants for **fatty foods**)
- L68 ANSWER 33 OF 57 HCA COPYRIGHT 2004 ACS on STN  
117:169731 The influence of food **emulsifiers** on fat and sugar **dispersions** in oils. II. Rheology, **colloidal** forces. Johansson, Dorota; Bergenstaahl, Bjoern (Inst. Surf. Chem., Stockholm, S-114 85, Swed.). Journal of the American Oil Chemists' Society, 69(8), 718-27 (English) 1992. CODEN: JAOCA7. ISSN: 0003-021X.
- AB The influence of food **emulsifiers** on the viscoelastic properties (storage modulus and yield value) of fat and sugar **dispersions** in vegetable oils has been investigated. It was found that almost all of the **emulsifiers** tested influence the rheol. of the **dispersions**. The magnitude and the direction of the rheol. changes depend on both the type and the amount of **emulsifier**. In most cases, the changes are relatively small, especially for fat crystals. Generally, the largest changes are caused by lecithins and saturated **monoglycerides**. The magnitudes of **colloidal** forces and equilibrium distances between the particles have been estimated from the rheol. network model of van den Tempel (1964) and from the correlation of the yield value to the interaction energy by T.J. Gillespie (1960) and Th.F. Tadros (1985; 1990). The results indicate that van der Waals forces alone cannot be responsible for the interparticle interaction in fat or sugar **dispersions**. The formation of water bridges is discussed as a probable source of interaction in both cases. Furthermore, the validity

- of the network model for fat and sugar **dispersions** in oils is questionable.
- CC 17-2 (Food and Feed Chemistry)
- ST oil fat sugar **emulsifier colloid** rheol
- IT Phosphatidylcholines, properties  
Phospholipids, properties  
RL: PRP (Properties)  
(fat and sugar **dispersions** in soybean oil interaction with, rheol. and **colloidal** forces in relation to)
- IT Fats and Glyceridic oils  
Soybean oil  
RL: BIOL (Biological study)  
(food **emulsifiers** interaction with fat and sugar **dispersions** in, rheol. and **colloidal** forces in relation to)
- IT **Emulsifying** agents  
(for food, fat and sugar **dispersions** in soybean oil interaction with, rheol. and **colloidal** forces in relation to)
- IT **Glycerides**, properties  
RL: PRP (Properties)  
(mono-, fat and sugar **dispersions** in soybean oil interaction with, rheol. and **colloidal** forces in relation to)
- IT **Glycerides**, properties  
RL: PRP (Properties)  
(mono-, unsatd., fat and sugar **dispersions** in soybean oil interaction with, rheol. and **colloidal** forces in relation to)
- IT Food functional properties  
(rheol., of fat and sugar **dispersions** in soybean oil, food **emulsifiers** interactions in relation to)
- IT 50-21-5D, Lactic acid, esters with **monoglycerides** 57-55-6D, Propylene glycol, **fatty acid esters** 111-03-5, Monoolein 12441-09-7D, **Sorbitan, fatty acid esters** 25618-55-7D, **Polyglycerol, fatty acid esters** 51591-38-9D, Diacetyl tartaric acid, esters with **monoglycerides**  
RL: BIOL (Biological study)  
(fat and sugar **dispersions** in soybean oil interaction with, rheol. and **colloidal** forces in relation to)
- IT 57-50-1, Sucrose, biological studies 555-43-1, Tristearin  
RL: BIOL (Biological study)  
(food **emulsifiers** interaction with **dispersions** of, in soybean oil, rheol. and **colloidal** forces in relation to)
- L68 ANSWER 34 OF 57 HCA COPYRIGHT 2004 ACS on STN
- 117:33699 **Dispersion** of water-**dispersible** or alcohol-soluble substances in low cloud point lipoidal materials. Hemker, Wilfred J. (Unilever UK Central Resources Ltd., USA). Can. CA 1292692 A1 19911203, 19 pp. (English). CODEN: CAXXA4. APPLICATION: CA 1987-539048 19870608. PRIORITY: US 1986-873802 19860613.
- AB A clear carrier for polar water-**dispersible** or alc.-soluble compds. comprises (1) a highly stable liquid oil or wax and (2) a combination of surfactants **dispersed** in the oil. The polar substances include FD&C dyes, flavorants, pigments, emollients, etc. The solubility of Et vanillin, ethanol, and benzyl alc. was tested in a carrier composition containing Durkex 500 (winterized vegetable oil) 92, octaglycerol pentaoleate 6, and triglycerol dioleate 2 %.

IC ICM A61K047-44  
ICS A61K007-00  
CC 63-6 (Pharmaceuticals)  
Section cross-reference(s): 17, 62  
IT Flavoring materials  
(**dispersion** of, in surfactant-containing oils)  
IT Surfactants  
(oils containing, for **dispersion** of polar compds.)  
IT Cottonseed oil  
Waxes and Waxy substances  
RL: BIOL (Biological study)  
(surfactant-containing, for **dispersion** of polar compds.)  
IT Soybean oil  
RL: BIOL (Biological study)  
(hydrogenated, surfactant-containing, for **dispersion** of polar compds.)  
IT Fats and Glyceridic oils  
RL: BIOL (Biological study)  
(vegetable, hydrogenated, surfactant-containing, for **dispersion** of polar compds.)  
IT 1934-21-0 25956-17-6, FD&C red number 40 68921-42-6 64-17-5, Ethanol, uses 100-51-6, Benzyl alcohol, uses 121-32-4, Ethyl vanillin  
RL: PROC (Process)  
(**dispersion** of, in surfactant-containing oils)  
IT 50-70-4D, Sorbitol, **fatty acid esters**  
57-50-1D, Sucrose, **fatty acid esters**  
1338-43-8, **Sorbitan** monooleate 9007-48-1, Polyglycerol oleate 66524-58-1 79665-94-4, Triglycerol dioleate 148464-04-4  
RL: BIOL (Biological study)  
(oils containing, for **dispersion** of polar compds.)  
IT 50-70-4D, Sorbitol, **fatty acid esters**  
1338-43-8, **Sorbitan** monooleate  
RL: BIOL (Biological study)  
(oils containing, for **dispersion** of polar compds.)  
  
L68 ANSWER 35 OF 57 HCA COPYRIGHT 2004 ACS on STN  
116:150443 Activated ascorbic acid antioxidant **compositions** and carotenoids, fats, and foods stabilized therewith. Todd, Paul H., Jr. (Kalamazoo Holdings, Inc., USA). PCT Int. Appl. WO 9200019 A1 19920109, 49 pp. DESIGNATED STATES: W: JP, KR; RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1991-US4503 19910624. PRIORITY: US 1990-544248 19900626.  
AB An activated ascorbic acid product with increased antioxidant activity, especially in fats, oils, and **fatty** foods comprises ascorbic acid in a solution of propylene glycol or a nonionic surface-active agent. The nonionic surface-active agent is selected from mono- and diglycerides; polyglyceride **esters** of **fatty acids**; mono- and diglycerides further **esterified** with citric or lactic acid; acetylated mono- and diglycerides further **esterified** with citric or lactic acid; **sorbitan esters** of **fatty acids**; and propylene glycol **esters** of **fatty acids**. The ascorbic acid is dissolved in the surface-active agent in the presence of a solubilizing medium, i.e. MeOH, EtOH, iPrOH, or water, then the solubilizing medium is removed. The ascorbic acid product may addnl. contain a natural antioxidant selected from Labiatae extract, tea extract, and tocopherol. In these products, the antioxidant activity of the components is synergistic. An antioxidant was prepared by dissolving ascorbic acid in MeOH-H2O and adding this solution to **glycerol**

monooleate. The solvent mixture was removed by rotary evaporation at 70°. The resulting antioxidant product was more effective than ascorbyl palmitate and rosemary in preventing oxidation of soybean oil.

- IC ICM A23L003-3499  
ICS C11B005-00; A23K003-00; A23G003-30
- CC 17-6 (Food and Feed Chemistry)
- ST antioxidant ascorbate propylene glycol; **emulsifier** nonionic  
ascorbic acid antioxidant
- IT Tocopherols  
RL: BIOL (Biological study)  
(ascorbic acid-propylene glycol/nonionic **emulsifier** solution  
containing, synergistic antioxidant activity of)
- IT Labiatae  
Rosemary  
Sage  
Tea products  
Thyme  
(extract, ascorbic acid-propylene glycol/nonionic **emulsifier**  
solution containing, synergistic antioxidant activity of)
- IT Resins  
RL: BIOL (Biological study)  
(oleo-, paprika, oxidation of, inhibition of, ascorbic acid-propylene  
glycol/nonionic **emulsifier** solution for)
- IT Feed  
Food  
(oxidation of, inhibition of, ascorbic acid-propylene glycol/nonionic  
**emulsifier** solution for)
- IT Canola oil  
Carotenes and Carotenoids, reactions  
Soybean oil  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(oxidation of, inhibition of, ascorbic acid-propylene glycol/nonionic  
**emulsifier** solution for)
- IT **Glycerides**, biological studies  
RL: BIOL (Biological study)  
(di-, ascorbic acid in, antioxidant activity of)
- IT **Fatty acids, esters**  
RL: BIOL (Biological study)  
(**esters**, with **sorbitan** or propylene glycol,  
ascorbic acid in, antioxidant activity of)
- IT **Glycerides**, compounds  
RL: BIOL (Biological study)  
(mixed **mono-** and di-, esters with lactic or citric acid and  
acetic acid, ascorbic acid in, antioxidant activity of)
- IT **Glycerides**, biological studies  
RL: BIOL (Biological study)  
(**mono-**, ascorbic acid in, antioxidant activity of)
- IT **Emulsifying agents**  
(nonionic, ascorbic acid in, antioxidant activity of)
- IT 9041-07-0D, Decaglycerol, c8\_10-acyl ester 25496-72-4, Glycerol  
monooleate 25618-55-7D, **Polyglycerol, fatty**  
**acid esters** 26266-58-0, **Sorbitan** trioleate  
75719-56-1, Octaglycerol monooleate  
RL: BIOL (Biological study)  
(ascorbic acid in, antioxidant activity of)
- IT 64-17-5, Ethanol, properties 67-56-1, Methanol, properties 67-63-0,  
Isopropanol, properties 7732-18-5, Water, properties  
RL: BIOL (Biological study)

- (in activated ascorbic acid-propylene glycol/nonionic **emulsifier** solution preparation, antioxidant activity in relation to)
- IT 6983-79-5, Bixin 7235-40-7,  $\beta$ -Carotene  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(oxidation of, inhibition of, ascorbic acid-propylene glycol/nonionic **emulsifier** solution for)
- IT 50-81-7, Ascorbic acid, properties  
RL: PRP (Properties)  
(propylene glycol or nonionic **emulsifier** solution of, antioxidant activity of)
- L68 ANSWER 36 OF 57 HCA COPYRIGHT 2004 ACS on STN  
116:104829 Whipping creams containing **emulsifier mixtures**.  
Kudo, Satoshi; Mori, Yoko; Watanabe, Takao (Yakult Honsha Co., Ltd., Japan; Niigata Engineering Co., Ltd.). Jpn. Kokai Tokkyo Koho JP 03240438  
A2 19911025 Heisei, 6 pp. (Japanese). CODEN: JKXXAF.  
APPLICATION: JP 1990-33936 19900216.
- AB Whipping creams contain **emulsifier** mixts. comprising phosphatidylglycerol-enriched lecithins, glycerin **fatty acid esters**, and  $\geq 1$  compds. chosen from **fatty acid esters** of polyglycerin, sucrose, and **sorbitan**. Lecithins containing 50% phosphatidylglycerol 0.2, Santone 3-1-S (polyglycerin **fatty acid ester**) 0.5, and Emalsy MS (glycerin **fatty acid ester**) 0.3 weight parts were dissolved into 41 weight parts coconut oil and mixed with 59 weight parts 6% skim milk solution at 70° to manufacture a cream with good whipping property.
- IC ICM A23C013-12  
ICS A23L001-19
- CC 17-8 (Food and Feed Chemistry)
- ST cream whipping **emulsifier** lecithin; glycerin fatty ester whipping cream; polyglycerin fatty ester whipping cream; sucrose fatty ester whipping cream; **sorbitan** fatty ester whipping cream
- IT Glycerides, biological studies  
RL: BIOL (Biological study)  
(**fatty acids** of, whipping creams containing, as **emulsifiers**)
- IT **Emulsifying** agents  
(modified lecithin and **polyol fatty acid esters** as, for whipping creams)
- IT Lecithins  
Lysophosphatidylglycerols  
Phosphatidylglycerols  
RL: BIOL (Biological study)  
(whipping creams containing, as **emulsifiers**)
- IT **Fatty acids, esters**  
RL: BIOL (Biological study)  
(**esters**, with **polyols**, whipping creams containing, as **emulsifiers**)
- IT Glycerides, biological studies  
RL: BIOL (Biological study)  
(tallow mono-, hydrogenated, whipping creams containing, as **emulsifiers**)
- IT **Fatty acids, esters**  
RL: BIOL (Biological study)  
(tallow, **esters**, with sucrose, whipping creams containing, as **emulsifiers**)
- IT Cream substitutes

- (whipped, modified lecithin and **polyol fatty acid esters** in, as **emulsifiers**)
- IT 57-50-1D, Sucrose, **fatty acid esters**  
1338-41-6, Emasol S 10 12441-09-7D, **Sorbitan, fatty acid esters** 25618-55-7D, Polyglycerin, **fatty acid esters** 26855-43-6, Santone 3-1S  
RL: BIOL (Biological study)  
(whipping creams containing, as **emulsifiers**)
- L68 ANSWER 37 OF 57 HCA COPYRIGHT 2004 ACS on STN  
116:27846 Cosmetic and pharmaceutical **composition** containing hydrated microspheres of hydrophilic lipids. Kauffmann, Myriam (Oreal S. A., Fr.). Eur. Pat. Appl. EP 452202 A1 **19911016**, 13 pp.  
DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, GB, GR, IT, LI, NL, SE. (French). CODEN: EPXXDW. APPLICATION: EP 1991-400933 19910405.  
PRIORITY: FR 1990-4387 19900405.
- AB An aqueous cosmetic or pharmaceutical composition contains a **suspension** of hydrated microspheres (mean diameter 50-10,000  $\mu$ m) of hydrophilic lipids. Microspheres with mean diameter 1000  $\mu$ m were prepared containing perfumes 30, glycerol monodipalmitoyl stearate 54, **PEG** monodipalmitoyl stearate 15.75, BHT 0.05, and preservatives 0.2 g. A perfumed gel contained above microspheres 5, Carbopol 940 0.3, triethanolamine q.s. to pH 6.5, methylparaben 0.2, glycerin 4, and water q.s. to 100 g.
- IC ICM A61K007-00  
ICS A61K009-16; A61K009-50; A61K007-48
- CC 62-4 (Essential Oils and Cosmetics)  
Section cross-reference(s): 63
- IT **Fatty acids**, biological studies  
RL: BIOL (Biological study)  
(C12-24, microspheres containing, in pharmaceutical and cosmetic compns.)
- IT **Fatty acids, esters**  
RL: BIOL (Biological study)  
(C12-24, **esters**, microspheres containing, in pharmaceutical and cosmetic compns.)
- IT Cosmetics  
(**emulsions**, hydrated microspheres manufactured from hydrophilic lipids in)
- IT **Fatty acids, esters**  
RL: BIOL (Biological study)  
(ethoxylated, microspheres containing, in pharmaceutical and cosmetic compns.)
- IT **56-81-5D**, 1,2,3-**Propanetriol**, C16-18-alkyl **monoesters** 112-72-1, Myristic alcohol 1338-41-6, **Sorbitan** monostearate 9005-00-9, Brij 72 25322-68-3D, C16-18-alkyl **monoesters** 124364-46-1, Labrafil M 2735CS  
RL: BIOL (Biological study)  
(microspheres containing, in pharmaceutical and cosmetic compns.)
- IT **56-81-5D**, 1,2,3-**Propanetriol**, C16-18-alkyl **monoesters**  
RL: BIOL (Biological study)  
(microspheres containing, in pharmaceutical and cosmetic compns.)
- L68 ANSWER 38 OF 57 HCA COPYRIGHT 2004 ACS on STN  
115:206600 Water-in-oil **emulsions** containing **suspensions** of hydrophilic solids. Toshio, Takemori; Toshinobu, Tsurumi; Masahiro, Takagi; Masaharu, Tanabe (Lotte Co., Ltd., Japan). Eur. Pat. Appl. EP 440203 A1 **19910807**, 5 pp. DESIGNATED STATES: R: BE, CH, DE,

FR, GB, IT, LI, NL. (English). CODEN: EPXXDW. APPLICATION: EP 1991-101219 19910130. PRIORITY: JP 1990-20381 19900201.

AB Novel food **emulsions** containing an aqueous solution and a hydrophilic anhydrous solid independently suspended in an oil phase are described. The composition of such an **emulsion**, including limitations on particle sizes are described. Hardened soybean oil (mp 34°) 39.5, sugar 25, powdered milk 25, and soybean phospholipid 0.5 parts were mixed and ground to a particle size  $\leq 40 \mu\text{m}$  (preparation 1). Hardened soybean oil 5, 5-fold concentrated apple juice 4.5, and **polyglycerol** condensed ricinoleic acid **ester** 0.5 parts were homogenized to make an **emulsion** of particle size  $\leq 2 \mu\text{m}$  (preparation 2). Preps. 1 and 2 were mixed to produce an apple-flavored cream filling.

IC ICM A23L001-00  
ICS A23L001-48; A23G001-00

CC 17-9 (Food and Feed Chemistry)

ST **emulsion** food water in oil

IT Bakery products  
(apple-flavored filling for, preparation of, as water-in-oil **emulsions** containing independently suspended aqueous solution and hydrophilic solid)

IT Apple juice  
Palm oil  
RL: BIOL (Biological study)  
(in water-in-oil **emulsions** containing independently suspended aqueous solution and hydrophilic solid)

IT Milk  
(powdered, in water-in-oil **emulsions** containing independently suspended aqueous solution and hydrophilic solid)

IT Confectionery  
(yogurt-like filling for, preparation of, as water-in-oil **emulsions** containing independently suspended aqueous solution and hydrophilic solid)

IT Oils, glyceridic  
RL: BIOL (Biological study)  
(butter, in water-in-oil **emulsions** containing independently suspended aqueous solution and hydrophilic solid)

IT Food  
(**emulsions**, water-in-oil, aqueous solution and hydrophilic solid independently suspended in, preparation of)

IT **Fatty acids, esters**  
RL: PREP (Preparation)  
(**esters**, with sucrose or **sorbitan**, as **emulsifying** agents in preparation water-in-oil **emulsions** containing independently suspended aqueous solution and hydrophilic solid)

IT Soybean oil  
RL: BIOL (Biological study)  
(hydrogenated, in water-in-oil **emulsions** containing independently suspended aqueous solution and hydrophilic solid)

IT Phospholipids, uses and miscellaneous  
RL: USES (Uses)  
(soya, **emulsifying** agent, in water-in-oil **emulsions** containing independently suspended aqueous solution and hydrophilic solid)

IT **Emulsions**  
(water-in-oil, aqueous solution and hydrophilic solid independently suspended in, preparation of)

IT Milk preparations  
(yogurt, in water-in-oil **emulsions** containing independently suspended aqueous solution and hydrophilic solid)

IT 25618-55-7D, **Polyglycerol, fatty acid esters** 68936-89-0D, **fatty acid esters**  
RL: BIOL (Biological study)  
(**emulsifying** agent, in water-in-oil **emulsions** containing independently suspended aqueous solution and hydrophilic solid)

IT 7732-18-5P  
RL: PREP (Preparation)  
(**emulsions**, water-in-oil, aqueous solution and hydrophilic solid independently suspended in, preparation of)

IT 57-50-1, Sucrose, biological studies 115536-98-6  
RL: BIOL (Biological study)  
(in water-in-oil **emulsions** containing independently suspended aqueous solution and hydrophilic solid)

L68 ANSWER 39 OF 57 HCA COPYRIGHT 2004 ACS on STN

115:99326 Pharmaceutical **compositions** containing 4,6-dioxoheptanoic acid or its derivatives and solubilizers. Hora, Maninder Singh; Jackson, Eugene, Jr. (Cetus Corp., USA). PCT Int. Appl. WO 9104734 A1 **19910418**, 18 pp. DESIGNATED STATES: W: JP; RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1990-US5275 19900917. PRIORITY: US 1989-414944 19890929.

AB The present invention is a pharmaceutically acceptable formulation of succinylacetone or  $\geq 1$  of its pharmaceutically active analogs. The formulation can include  $\geq 1$  base (NaOH, arginine, lysine, or glutamine) to produce a pH of 3.0-8.0. A different formulation can include a solubilizer (EtOH; cosolvents such as **PEG** or propylene glycol; nonionic surfactants (polyoxyethylene **sorbitan fatty acid esters**, polyethylene glycol **esters**, polyethylene **fatty acid esters**, block copolymers of ethylene oxide and propylene oxide, ethylated **fatty alc.** ethers, and octylphenoxy polyethoxyethanol compds. An alternative formulation can comprise a covalent conjugate between the succinylacetone or analog thereof and **PEG**, polypropylene glycol, polyoxyethylene **polyol**, or polyproline. The present invention provides methods for manufacturing stable and soluble formulations of succinylacetone or its analogs, which themselves are insol. Thus, a pharmaceutical solution contained Et 4-cetyl-5-oxohexanoate (213.1 mg/mL) in **PEG-400** 50, EtOH 2, and H<sub>2</sub>O 28%. The solution was stable for  $\geq 7$  days at room temperature

IC ICM A61K031-19

ICS A61K009-00; A61K047-02; A61K047-18; A61K047-48

CC 63-6 (Pharmaceuticals)

ST succinylacetone pharmaceutical soly stability; ethylcetyloxohexanoate pharmaceutical **PEG** ethanol

IT Pharmaceutical dosage forms

(**emulsions**, succinylacetone or analogs in stable, pH adjuster and solubilizer and polymers in)

IT 64-17-5D, Ethanol, fatty ethers 9005-63-4D, Polyoxyethylene

**sorbitan, fatty acid esters**

9036-19-5D, Octylphenoxy polyethoxy ethanol, derivs. 25322-68-3D,

Polyethylene glycol, esters

RL: BIOL (Biological study)

(as solubilizers, in pharmaceutical compns. containing succinylacetone or analogs)

L68 ANSWER 40 OF 57 HCA COPYRIGHT 2004 ACS on STN

115:90999 A foam-forming **formulation** and its use in food



preparation. Yokoyama, Kazuaki; Taniguchi, Kyomi; Sekiguchi, Toshio; Kaneko, Tomiatsu (Miyoshi Oil and Fat Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 03098528 A2 19910424 Heisei, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1989-236518 19890912.

AB A foam-forming composition comprised of edible oils, polysaccharide, **emulsifiers**, and water is described for use in preparing food such as cakes or breads to give homogeneous foam space or to avoid an undesirable texture caused by filling of the foam. A series of composition containing oils such as hardened fish oil, hardened soy bean oil, etc., polysaccharides such as corn starch, guar gum, etc., and **emulsifiers** such as glycerin monofatty acid esters, lecithins, etc. were described were used in baking soft rolls.

IC ICM A21D002-16

ICS A21D002-18; A21D002-32

CC 17-13 (Food and Feed Chemistry)

IT **Emulsifying agents**

Lecithins

Oils, glyceridic

Polysaccharides, uses and miscellaneous

Tallow

RL: BIOL (Biological study)

(in foam-forming composition, for food preparation)

IT 56-81-5, 1,2,3-Propanetriol, biological studies 57-50-1D, Sucrose, **fatty acid esters** 57-55-6D, 1,2-

**Propanediol, fatty acid esters**

9000-01-5, Gum arabic 9000-07-1, Carrageenan 9000-30-0, Guar gum

9000-40-2, Locust bean gum 9000-69-5, Pectin 9005-32-7, Alginic acid

9005-38-3, Sodium alginate 11138-66-2, Xanthan gum 12441-09-7D,

**Sorbitan, fatty acid esters**

RL: BIOL (Biological study)

(in foam-forming composition, for food preparation)

L68 ANSWER 41 OF 57 HCA COPYRIGHT 2004 ACS on STN

114:162818 Propolis food **compositions** containing **polyols** and **polyol fatty acid esters**, and

their manufacture. Hamanaka, Hiroyoshi; Harada, Mika (Nippon Proparisu K. K., Japan). Jpn. Kokai Tokkyo Koho JP 02245159 A2 19900928 Heisei, 10 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1989-68895 19890320.

AB Propolis food compns. are manufactured by mixing (1) monoalc. extract of propolis,

(2) monoalc.-soluble propolis, or (3) propolis (at 50-100°) with **polyols**. in which 0.01-25 weight parts (based on 100 weight parts total of propolis and the **polyols**) **polyol fatty acid ester** surfactants are uniformly dissolved or **dispersed** (and separation of **polyol**-insol. propolis).

Tetraglycerin monooleate (1 weight part) was **dispersed** in 95 weight parts glycerin, mixed with 50 weight parts EtOH extract (10 weight%) of

propolis,

and EtOH was removed at 80-85° in vacuo to manufacture propolis food, which improved symptoms of hangover, asthma, and allergy in patients.

IC ICM A23L001-30

ICS A23L002-38

CC 17-13 (Food and Feed Chemistry)

Section cross-reference(s): 1

ST propolis **polyol fatty ester** food; hangover asthma allergy treatment propolis; surfactant **polyol fatty ester** propolis

- IT Propolis  
(foods containing **polyols** and **polyol fatty acid esters** and)
- IT Surfactants  
(**polyol fatty acid esters**, for propolis)
- IT **Fatty acids, esters**  
RL: BIOL (Biological study)  
(**esters**, with **polyols**, foods containing propolis and **polyols** and)
- IT 50-70-4, D-Glucitol, biological studies 56-81-5, 1,2,3-**Propanetriol**, biological studies 57-50-1, Sucrose, biological studies 57-55-6, 1,2-**Propanediol**, biological studies 58-86-6, D-Xylose, biological studies 90-80-2, Glucono- $\delta$ -lactone 526-95-4, Gluconic acid  
RL: BIOL (Biological study)  
(foods containing propolis and **polyol fatty acid esters** and)
- IT 1330-80-9, Propylene glycol monooleate 1338-39-2, **Sorbitan** monolaurate 1338-43-8, **Sorbitan** monooleate 25339-99-5, Sucrose monolaurate 27215-38-9, Glycerin monolaurate 33940-99-7, Decaglycerin dioleate 71012-10-7, Tetraglycerin monooleate 75798-42-4, Tetraglycerin monolaurate 96499-68-2 121074-76-8 123609-87-0 133136-57-9 133176-73-5  
RL: BIOL (Biological study)  
(foods containing propolis and **polyols** and)
- IT 64-17-5, Ethanol, biological studies  
RL: BIOL (Biological study)  
(propolis extracted with, foods containing **polyols** and **polyol fatty acid esters** and)
- IT 50-70-4, D-Glucitol, biological studies 56-81-5, 1,2,3-**Propanetriol**, biological studies  
RL: BIOL (Biological study)  
(foods containing propolis and **polyol fatty acid esters** and)
- IT 1338-43-8, **Sorbitan** monooleate  
RL: BIOL (Biological study)  
(foods containing propolis and **polyols** and)
- L68 ANSWER 42 OF 57 HCA COPYRIGHT 2004 ACS on STN 112:177289 Fat and oil containing **emulsifying** agent **compositions** for bakery products. Sugihara, Hiroshi; Kiyama, Tsukasa; Ide, Shushiro (Fuji Oil Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 01240133 A2 19890925 Heisei, 4 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1988-66305 19880318.
- AB Fat and oil compns. that are **emulsifying** agents for bakery products (e.g. sponge cakes, butter cakes) contain fats and oils 20-40, glycerin saturated **fatty acid esters** 4-12, propylene glycol **fatty acid esters** 1-10, **sorbitan fatty acid esters** 1-7, sucrose **fatty acid esters** 0.5-2, polyalcs. 10-40, and H<sub>2</sub>O 10-30 weight% as essential ingredients. The compns. are used in all-in-mix type cake manufacturing and have long-lasting foaming ability (sic.). An **emulsifying** fat and oil composition was manufactured by mixing rape oil 30, glycerin monostearate ( $\geq 90\%$  **monoglyceride**, 95% monostearate) 8, propylene glycolbehenate 5, **sorbitan fatty acid esters** 2, decaglycerol monomyristate 1, **sugaresters** (HLB 11) 1.2, 70% sorbitol 30, H<sub>2</sub>O

20.8, and EtOH 2 weight% at .apprx.70-75°. A cake baked using the composition showed good texture.

IC ICM A21D002-16

ICS A21D002-14; A21D002-18; A23D005-00

CC 17-9 (Food and Feed Chemistry)

ST **emulsifying** fat oil bakery fatty; glycerin glycol

**sorbitan emulsifying** bakery; sucrose polyalc oil

**emulsifying** bakery

IT **Emulsifying** agents

(containing fats and oils and **fatty acid esters**

and polyalcs. and water, for bakery products)

IT Rape oil

RL: BIOL (Biological study)

(**emulsifying** compns. containing **fatty acid**

**esters** and polyalcs. and water and, for bakery products)

IT Bakery products

(cakes, **emulsifying** compns. containing fats and oils and

**fatty acid esters** and polyalcs. and water

for)

IT **Fatty acids, esters**

RL: BIOL (Biological study)

(**esters, emulsifying** compns. containing fats and oils

and polyalcs. and water and, for bakery products)

IT Alcohols, biological studies

RL: BIOL (Biological study)

(polyhydric, **emulsifying** compns. containing fats and oils and

**fatty acid esters** and water and, for bakery

products)

IT 57-50-1D, Sucrose, **fatty acid esters**

12441-09-7D, **Sorbitan, fatty acid**

**esters** 31566-31-1, Glycerin monostearate 87390-32-7,

Decaglycerol monomyristate 100214-87-7, Propylene glycol behenate

RL: BIOL (Biological study)

(**emulsifying** compns. containing fats and oils and **fatty**

**acid esters** and polyalcs. and water and, for bakery

products)

IT 50-70-4, Sorbitol, biological studies

RL: BIOL (Biological study)

(**emulsifying** compns. containing fats and oils and **fatty**

**acid esters** and water and, for bakery products)

IT 50-70-4, Sorbitol, biological studies

RL: BIOL (Biological study)

(**emulsifying** compns. containing fats and oils and **fatty**

**acid esters** and water and, for bakery products)

L68 ANSWER 43 OF 57 HCA COPYRIGHT 2004 ACS on STN

111:132946 Mold-releasing oils containing enzyme-treated lecithins and

**dispersants** for confectionery and breads. Shimizu, Teruo (Nippon

Oils & Fats Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 63296649 A2

19881202 Showa, 4 pp. (Japanese). CODEN: JKXXAF. APPLICATION:

JP 1987-134615 19870529.

AB Edible fats and oils blended with phospholipase-treated lecithins,

polyglycerin poly(ricinoleic acid) **esters**, and/or polyglycerin

**fatty acid esters** [hydrophile-lipophile

balance (HLB) 3-8] as **dispersants** are useful as mold-releasing

oils in manufacture of breads and confectionery. Thus, a cake baked in a mold

coated with corn oil containing 5% Elmizer A (monoacylphospholipid) and 5%

hexaglycerin pentastearate (HLB 4.5) was easy to release from the mold.

IC ICM A23D005-00  
CC 17-11 (Food and Feed Chemistry)  
IT **Dispersing agents**  
(polyglycerin esters, mold-release oils containing, for breads and confectionery)  
IT **Fatty acids, esters**  
RL: BIOL (Biological study)  
(esters, with polyols, dispersants, mold-release oils containing, for breads and confectionery)  
IT 57-50-1D, **fatty acid esters** 57-55-6D, 1,2-**Propanediol, fatty acid esters** 12441-09-7D, **Sorbitan, fatty acid esters** 25618-55-7D, Polyglycerin, **fatty acid esters** 31566-31-1 68936-89-0 71185-87-0, Hexaglycerin tristearate 94336-22-8 99734-30-2, Hexaglycerin pentastearate 114355-43-0  
RL: BIOL (Biological study)  
(dispersants, mold-release oils containing, for breads and confectionery)  
  
L68 ANSWER 44 OF 57 HCA COPYRIGHT 2004 ACS on STN  
110:191534 **Composition** and method for producing vitamin-enriched milk. Karinen, Timothy J. (PPG Industries, Inc., USA). U.S. US 4803087 A 19890207, 5 pp. (English). CODEN: USXXAM. APPLICATION: US 1987-76109 19870721.  
AB A method for enriching milk with vitamin A and/or D comprises adding to raw milk an aqueous **emulsion** of edible oil, e.g. soybean oil, a source of vitamin A and/or D, and an **emulsifying** agent which is a combination of (a) polyoxyethylene **sorbitans** oleate and/or -stearate and (b) **glycerol**-, sucrose-, or sorbitol mono-oleate, **polyglycerol esters of fatty acids**, or polyoxyethylene glycerates, the ratio of a:b being (2:5)-(5:2). Vitamins introduced by this method remain with the milk fluid throughout its processing.  
IC A23L009-20; A23L005-00  
ICM A23L001-303  
NCL 426073000  
CC 17-8 (Food and Feed Chemistry)  
ST milk vitamin enrichment aq **emulsion**  
IT Coconut oil  
Corn oil  
Cottonseed oil  
Oils, glyceridic  
Peanut oil  
Soybean oil  
RL: BIOL (Biological study)  
(aqueous **emulsion** containing vitamin A and/or D and **emulsifier** and, for vitamin-enriched milk manufacture)  
IT **Emulsifying agents**  
(aqueous **emulsion** containing vitamin A and/or D and oil and, for vitamin-enriched milk manufacture)  
IT Oils, glyceridic  
RL: BIOL (Biological study)  
(vegetable, aqueous **emulsion** containing vitamin A and/or D and **emulsifier** and, for vitamin-enriched milk manufacture)  
IT 1333-68-2, Sorbitol mono-oleate 9005-65-6, Polyoxyethylene **sorbitan** mono-oleate 9062-90-2 9063-46-1 25496-72-4, Glycerol mono-oleate 25496-92-8, Sucrose mono-oleate 25618-55-7D,

**Polyglycerol, fatty acid esters**

RL: BIOL (Biological study)

(aqueous **emulsion** containing vitamin A and/or D and oil and, for vitamin-enriched milk manufacture)

IT 11103-57-4P, Vitamin A

RL: PREP (Preparation)

(milk enriched with, manufacture of, aqueous vitamin-containing **emulsion** addition to raw milk for)

L68 ANSWER 45 OF 57 HCA COPYRIGHT 2004 ACS on STN

109:169873 Preparation of polyglycerin **fatty acid****esters** with high HLB value as **emulsifying**,**dispersing**, and solubilizing agents. Miyamoto, Atsushi (Sakamoto

Yakuhin Kogyo Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 63023837 A2

19880201 Showa, 5 (Japanese). CODEN: JKXXAF. APPLICATION: JP

1986-167393 19860715.

AB The title **esters**, useful as **emulsifying**,**dispersing**, and solubilizing agents for food, cosmetic, and other

industries, were prepared by removing unreacted polyglycerin (I) from an

**esterification** product of 1.0 mol part I with  $\leq 1.0$  mol part**fatty acids** with a solvent and distilling off the solvent,

if necessary. I (average d.p. = 10) (5 mol) was treated with 0.75 mol stearic

acid (II) and NaOH at 230-240° for 3 h, the reaction product was

dissolved in EtOH containing H<sub>2</sub>O, mixed with C<sub>6</sub>H<sub>6</sub>, the mixture was kept at

normal temperature for 1 h, and then the upper layer was evaporated to give

585 g I

stearate (III) of HLB value 14.3. III was dissolved in H<sub>2</sub>O and thick malt

syrup with mixing, a mixture of tocopherol (IV) and soybean oil was added

and kept at normal temperature to stabilize IV without separation or turbidity

even

after 7 days, whereas the control **ester** of HLB value 11.0,

prepared from 1.0 mol I and 1.1 mol II, showed separation into 2 layers.

IC ICM C07C069-22

CC 23-17 (Aliphatic Compounds)

Section cross-reference(s): 17, 35, 62

ST polyglycerin **fatty ester** high HLB; **polyglycerol**stearate prepn **emulsifying** agent; **dispersing** agent**polyglycerin fatty ester**; solubilizing agent **polyglycerin fatty****ester**

IT Cosmetics

Food

(emulsifying, dispersing and solubilizing agents,

polyglycerides as)

IT Dispersing agents

Emulsifying agents

Solubilizers

(polyglycerin **fatty acid esters**)

IT Tocopherols

RL: PROC (Process)

(solubilization of, with polyglycerin **fatty acid****esters**)

IT Glycerides, polymers

RL: RCT (Reactant); RACT (Reactant or reagent)

(polymers, **emulsifying** and **dispersing** and

solubilizing agents)

IT 25618-55-7, Polyglycerin

RL: RCT (Reactant); RACT (Reactant or reagent)

(esterification of, with **fatty acids**)

- IT 57-10-3, Palmitic acid, reactions 57-11-4, reactions **112-80-1**,  
**Oleic acid**, reactions 143-07-7, Lauric acid, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(**esterification** of, with polyglycerin)
- IT 9007-48-1P, Polyglycerin oleate 9009-32-9P 51330-20-2P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(oligomeric, preparation of, as **emulsifying** and **dispersing**  
and solubilizing agent)
- IT 74504-64-6P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as **emulsifying** and **dispersing** and  
solubilizing agent)
- IT **112-80-1**, **Oleic acid**, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(**esterification** of, with polyglycerin)
- L68 ANSWER 46 OF 57 HCA COPYRIGHT 2004 ACS on STN
- 108:149144 Improved surfactant **composition** containing  
monoacylglycerophospholipids. Fujita, Satoshi; Nakai, Eiji; Noike, Akira  
(Asahi Denka Kogyo K. K., Japan; Nippon Shoji Co., Ltd.). Eur. Pat. Appl.  
EP 245871 A2 **19871119**, 31 pp. DESIGNATED STATES: R: AT, BE,  
CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW.  
APPLICATION: EP 1987-107069 19870515. PRIORITY: JP 1986-113245 19860516;  
JP 1986-113246 19860516; JP 1986-141624 19860618; JP 1986-141625 19860618;  
JP 1986-141627 19860618; JP 1986-141628 19860618.
- AB A surfactant composition useful in food, cosmetics, etc. comprises a  
monoacylglycerophospholipid and  $\geq 1$  **polyglycerol-**, and  
sucrose-, sorbitan-, or **glycerol fatty**  
**acid esters**. The composition exhibits excellent acid- and  
salt-resistance, permeability, **emulsification** and  
**dispersion** capabilities, and hydrophilicity. A composition containing  
lysophosphatidylcholine 94 and lysophosphatidylethanolamine 3% was mixed  
with a **polyglycerol fatty acid ester**  
(Sun Soft Q-17-U; HLB 15) at various weight ratios (e.g. 5:95 - 90:10) and an  
aqueous paste containing this mixture 50 weight% was prepared These compns.  
displayed  
improved **emulsification** stability (e.g., with corn oil and soy  
sauce),  $\beta$ -carotene solubilization, and surface activity (decreased  
surface tension and permeation periods), relative to compns. containing no  
monoacylglycerophospholipid.
- IC ICM B01F017-00
- CC **17-6** (Food and Feed Chemistry)  
Section cross-reference(s): 46, 62
- ST surfactant **polyol ester** glycerophospholipid monoacyl
- IT Surfactants  
(**polyol fatty acyl esters-** and  
monoacylglycerophospholipid-containing, effect on **emulsion**  
stability of)
- IT Lysophosphatidic acids  
Lysophosphatidylethanolamines  
Lysophosphatidylinositols  
Lysophosphatidylserines  
RL: BIOL (Biological study)  
(surfactants containing lysophosphatidylcholine and **polyol**  
**esters** and, effect on **emulsion** stability of)
- IT Lysophosphatidylcholines  
Lysophosphatidylglycerols  
RL: BIOL (Biological study)

- (surfactants containing **polyol fatty acyl esters** and, effect on **emulsion** stability of)
- IT 50-70-4D, Sorbitol, **fatty acid esters**  
56-81-5D, Glycerol, **fatty acid esters** 57-50-1D, Sucrose, **fatty acid esters** 12441-09-7D, Sorbitan, **fatty acid esters** 25618-55-7D, Polyglycerol, **fatty acid esters** 40854-78-2D, Sorbide, **fatty acid esters**  
RL: BIOL (Biological study)  
(surfactants containing monoacylglycerophospholipids and, effect on **emulsion** stability of)
- IT 50-70-4D, Sorbitol, **fatty acid esters**  
56-81-5D, Glycerol, **fatty acid esters**  
RL: BIOL (Biological study)  
(surfactants containing monoacylglycerophospholipids and, effect on **emulsion** stability of)
- L68 ANSWER 47 OF 57 HCA COPYRIGHT 2004 ACS on STN  
108:96649 **Dispersion** of higher alcohols. Noguchi, Yasuhisa; Funada, Tadashi (Nippon Oils & Fats Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 62099334 A2 **19870508** Showa, 5 pp. (Japanese). CODEN: JKXXAF.  
APPLICATION: JP 1985-240212 19851026.
- AB Aqueous **dispersions** useful in food, pharmaceuticals, and cosmetics are prepared by mixing solns. of fatty alcs. in lower alcs. with water to precipitate fatty alcs., distilling the lower alcs., and **dispersing** the fatty alcs. with surfactants. Fatty alcs. from rice bran wax were dissolved (10 g) in 300 g EtOH at .apprx.60°, mixed with 500 g water over 30 min, distilled at .apprx.40° in vacuo to give 286 g aqueous **dispersion**, and stirred with 1 g sucrose fatty ester in 214 g H2O to give a **dispersion** with particle size 1-3  $\mu$  and no coagulation or ptn. after >6 mo.
- IC ICM C07C031-02  
ICS A23L001-03; A23P001-04; B01J013-00; C07C029-00
- CC 45-5 (Industrial Organic Chemicals, Leather, Fats, and Waxes)  
Section cross-reference(s): 17, 62, 63
- ST fatty alc **dispersion** aq; food fatty alc **dispersion**; pharmaceutical fatty alc **dispersion**; cosmetic fatty alc **dispersion**; sucrose fatty ester **dispersant**
- IT **Fatty acids, esters**  
RL: USES (Uses)  
(**esters** with sucrose, **dispersants** for fatty alcs. in water)
- IT **Dispersing agents**  
(**fatty acid polyol esters**, for **fatty alcs.** in water)
- IT Alcohols, uses and miscellaneous  
RL: USES (Uses)  
(fatty, aqueous **dispersions**, manufacture of, **dispersing agents** for)
- IT 57-50-1D, Sucrose, **fatty acid esters**  
**26658-19-5** 31566-31-1  
RL: USES (Uses)  
(**dispersants**, for fatty alcs. in water)
- IT **26658-19-5**  
RL: USES (Uses)  
(**dispersants**, for fatty alcs. in water)

L68 ANSWER 48 OF 57 HCA COPYRIGHT 2004 ACS on STN

107:216465 Foaming cream **compositions**. Hayashi, Toshihiro; Kono, Hiroshige; Sugie, Masayuki (Asahi Denka Kogyo K. K., Japan). Jpn. Tokkyo Koho JP 62036649 B4 **19870807** Showa, 8 pp. (Japanese). CODEN: JAXXAD. APPLICATION: JP 1977-59570 19770523.

AB Acidic foods, **emulsifiers** containing **sorbitan** unsatd.

**fatty acid esters** and/or lecithins, sucrose

**fatty acid esters** and **glycerol**

**fatty acid esters**, **sorbitan** saturated

**fatty acid esters** and/or propylene

**glycerol fatty acid esters** (0.2-20)

weight%), fats and oils (18-35 weight%), and an aqueous protein stabilizer solution

(65-82 weight%) are mixed to form a stable foaming cream composition (toppings, fillings, etc.). Thus, hardened soybean oil 20, corn oil 3 and coconut oil 2 parts were mixed, followed by mixing with **sorbitan** oleate 0.4, **glycerol** monostearate-**glycerol** monooleate 0.1, defatted milk powder 4.9, corn syrup solids 10, sugar 5, maltose 5, Na hexametaphosphate 0.07, CM-cellulose 0.15, and sucrose **fatty acid esters** 0.1 part. The mixture was homogenized, sterilized at 80° for 2 min, cooled to 10°, kept at 5° for 18 h for aging, mixed with a strawberry jam and stirred for foaming to give a product which was cooled to -20° within 8 h, frozen for 2 days, and thawed at 5°. The resultant product was stable at 15° for 2 h.

IC A23L001-19

ICA A23C009-12

CC 17-9 (Food and Feed Chemistry)

ST foaming cream food; topping manuf **emulsifier** oil fat; filling manuf **emulsifier** oil fat; **emulsifier** filling topping manuf; fat filling topping manuf; oil filling topping manuf

IT Butter

**Emulsifying agents**

Food

Jams and Jellies

Stabilizing agents

Coconut oil

Corn oil

Fats, biological studies

Palm oil

RL: BIOL (Biological study)

(acidic, in filling and topping and other foaming cream compns. manufacture)

IT Condiments

(toppings and fillings, manufacture of, acidic foods and **emulsifiers** and fats and oils and protein stabilizers in)

IT 50-70-4, biological studies 50-99-7, Glucose, biological studies

**56-81-5D, Glycerol, esters with fatty**

**acids** 57-50-1, biological studies 57-50-1D, **esters**

with **fatty acids** 57-55-6D, **esters** with

**fatty acids** 69-79-4, Maltose 9000-07-1, Carrageenan

12441-09-7D, **Sorbitan, esters** with unsatd.

**fatty acids** 25190-52-7 25496-72-4 31566-31-1,

Glycerol monostearate 37318-79-9, **Sorbitan** oleate

RL: BIOL (Biological study)

(acidic, in filling and topping and other foaming cream compns. manufacture)

IT **56-81-5D, Glycerol, esters with fatty**



**acids**

RL: BIOL (Biological study)

(acidic, in filling and topping and other foaming cream compns. manufacture)

L68 ANSWER 49 OF 57 HCA COPYRIGHT 2004 ACS on STN

107:57727 Stable synthetic whipping cream **composition**. Murata, Kiyoshi; Koshimizu, Shigeru (Taiyo Yushi Co., Ltd., Japan). Jpn. Tokkyo Koho JP 62014257 B4 **19870401** Showa, 12 pp. (Japanese). CODEN: JAXXAD. APPLICATION: JP 1979-49394 19790419.

AB Synthetic whipping cream compns. are formulated from oils and fats 40-50, milk, skimmed milk, or milk solids-containing liquid 50-60, lecithins 0.2-0.7, **self-emulsifiable sorbitan fatty acid esters** <0.3, **self-emulsifiable glycerol fatty acid esters** <0.1, 1/2 of lecithin + **self-emulsifiable glycerol fatty acid esters** ≤1.05, lecithins + **self-emulsifiable sorbitan fatty acid esters** + **emulsifiable glycerol fatty acid esters** ≤2.5, **emulsifiable sorbitan fatty acid esters** + **emulsifiable glycerol fatty acid esters** ≤0.5%. The addition of the **self-emulsifiable sorbitan fatty acid esters** and **self-emulsifiable glycerol fatty acid esters** markedly increases the stability of the synthetic whipping cream composition to temperature changes and vibration during transportation

and

storage. The product has high foaming and form-holding capacities. Thus, an example composition contained hydrogenated rape oil 90, hydrogenated palm oil 10, **self-emulsifiable sorbitan fatty acid ester** 1.6, **self-emulsifiable glycerol fatty acid ester** 0.2, soybean lecithins 0.5, and synthetic cream fat 40%. The composition was more stable to heat and vibration, and had a higher over-run value and better foam-holding characteristics as compared with the control containing non-**self-emulsifiable sorbitan fatty acid esters** and non-**self-emulsifiable glycerol fatty acid esters**.

IC A23L001-19

CC 17-9 (Food and Feed Chemistry)

IT Lecithins

RL: BIOL (Biological study)

(whipping cream composition containing **self-emulsifiable sorbitan fatty acid esters** and **glycerol fatty acid esters** and, stability in relation to)

IT Cream substitutes

(whipped, stability enhancement in, **sorbitan fatty acid esters** and **glycerol fatty acid esters** for)

IT 56-81-5D, **Glycerol, fatty acid esters** 12441-09-7D, **Sorbitan, fatty acid esters**

RL: BIOL (Biological study)

(self-**emulsifiable**, synthetic whipping cream composition containing, stability in relation to)IT 56-81-5D, **Glycerol, fatty acid**

**esters**

RL: BIOL (Biological study)

(self-emulsifiable, synthetic whipping cream composition containing, stability in relation to)

L68 ANSWER 50 OF 57 HCA COPYRIGHT 2004 ACS on STN

105:23354 Oil-in-water-type **emulsion compositions**.Ochiai, Kazuo; Ihara, Kiyoshi (Kanegafuchi Chemical Industry Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 61054230 A2 **19860318** Showa, 4 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1984-174252 19840822.

AB Oil/water-type **emulsion** compns. for food processing (coffee cream, whipped cream, mayonnaise, dressings, etc.) comprise casein (<0.3%), and citric acid **monoglyceride** and(or) lactic acid **monoglyceride** (0.01-0.9%) as **emulsifiers**. The viscosity remained unchanged at a wide range of pH values (2-9). Thus, corn oil was melted at 80° and mixed with 0.2% citric acid **monoglyceride** and 0.3% **sorbitan fatty acid esters**. Sep., a protein solution was prepared containing whey protein 0.1, phosphate salt 0.1, and **polyglycerol fatty acid esters** 0.3%. The oil composition (4.7 kg) and the protein composition (5.3 kg) were homogenized at 100 kg/cm<sup>2</sup> and sterilized at 140° for 2 s. The flavor and thickness remained unchanged at a pH range of 2-9.

IC ICM B01J013-00

ICS A23L001-035; A23L001-19; A23L001-24; A23L001-314; B01F017-38

ICA A23C013-14; A23G003-00; A23G009-02

CC **17-8** (Food and Feed Chemistry)

Section cross-reference(s): 62

ST food **emulsion**

IT Caseins, uses and miscellaneous

RL: BIOL (Biological study)

(emulsion food containing)

IT Cream

Cream substitutes

Food

Mayonnaise

Salad dressings

(emulsions containing casein and **monoglycerides** for)IT **Fatty acids, esters**

RL: BIOL (Biological study)

(esters with polyglycerides, **emulsion** food containing)IT **Emulsions**(oil-in-water, for foods, casein and **monoglycerides** in)

IT Whey

(proteins of, **emulsion** foods containing)

IT Cream substitutes

(whipped, **emulsions** containing casein and **monoglycerides** for)IT 25618-55-7D, **ester** with **fatty acid**

26855-41-4 36291-32-4

RL: BIOL (Biological study)

(emulsion food containing)

L68 ANSWER 51 OF 57 HCA COPYRIGHT 2004 ACS on STN

100:101826 The control of citrus storage disease by a sodium bicarbonate

**formulation**. Homma, Y.; Arimoto, Y.; Misato, T. (Inst. Phys.Chem. Res., Wako, 351, Japan). Proceedings of the International Society of Citriculture, Volume Date 1981, 2, 823-5 (English) **1983**.

CODEN: PICIDM.

- AB NaHCO<sub>3</sub> (I) had an inhibitory effect against citrus green mold and cucumber powdery mildew. However, the inhibitory effect of I did vary by replicated results. I combined with **emulsifier** of some food additives, such as soybean lecithin, **glycerol fatty acid ester**, Na chondroitin sulfate, or sucrose **fatty acid ester**, strongly inhibited citrus common green mold and cucumber powdery mildew. Further, formulated I had an inhibitory effect on thiophanate-Me or thiabendazol-resistant *Penicillium* decay in mandarin orange.
- CC 17-10 (Food and Feed Chemistry)
- IT **Fatty acids**, biological studies  
RL: BIOL (Biological study)  
(**glycerol** or **sorbitan** or sucrose **esters**, sodium bicarbonate inhibition of *Penicillium* of orange enhancement by)
- IT 56-81-5D, **esters** with **fatty acids**  
57-50-1D, **esters** with **fatty acids** 577-11-7  
8061-51-6 9016-45-9 9082-07-9 12441-09-7D, **esters** with **fatty acids** 25155-30-0 25324-14-5 34398-05-5  
RL: BIOL (Biological study)  
(sodium bicarbonate inhibition of *Penicillium* of mandarin orange enhancement by)
- IT 56-81-5D, **esters** with **fatty acids**  
RL: BIOL (Biological study)  
(sodium bicarbonate inhibition of *Penicillium* of mandarin orange enhancement by)
- L68 ANSWER 52 OF 57 HCA COPYRIGHT 2004 ACS on STN
- 100:66986 Feed **composition** for eel farming. (Nihon Nosan Kogyo K. K., Japan). Jpn. Kokai Tokkyo Koho JP 58183045 A2 **19831026** Showa, 3 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1982-65365 19820421.
- AB Addition of  $\geq 1$  of the **emulsifiers: glycerol fatty acid esters**, sucrose **fatty acid esters**, sorbitol **fatty acid esters**, propylene glycol **fatty acid esters**, polyoxyethylene **sorbitan fatty acid esters**, and polyoxyethylene glycol **fatty acid esters**, to conventional eel feeds markedly improves phys. properties in water, feeding preference, and feed efficiency.
- IC A23K001-18
- CC 17-12 (Food and Feed Chemistry)
- ST eel feed **emulsifier**
- IT **Fatty acids**, compounds  
RL: BIOL (Biological study)  
(**emulsifiers** containing, for eel feed)
- IT Feed  
(**fatty acid esters emulsifiers** for, for eel)
- IT **Emulsifying agents**  
(**fatty acid esters**, for eel feed)
- IT Eel and Moray  
Fish  
(feed for, **fatty acids ester emulsifiers** for)
- IT 50-70-4D, **esters** with **fatty acids**  
56-81-5D, **esters** with **fatty acids**  
57-55-6D, **esters** with **fatty acids**  
9005-63-4D, **esters** with **fatty acids**

25322-68-3D, **esters with fatty acids**  
RL: BIOL (Biological study)  
(**emulsifier**, for eel feed)

IT 50-70-4D, **esters with fatty acids**  
56-81-5D, **esters with fatty acids**  
RL: BIOL (Biological study)  
(**emulsifier**, for eel feed)

L68 ANSWER 53 OF 57 HCA COPYRIGHT 2004 ACS on STN  
93:148475 Food additive **composition** and process for preparation thereof. Inamine, Shigeo; Matsuda, Toshio; Shimomura, Takeo (Kabushiki Kaisha Ueno Seiyaku Oyo Kenkyujo, Japan). Can. CA 1076874 19800506, 24 pp. (English). CODEN: CAXXA4. APPLICATION: CA 1977-279553 19770531.

AB A surfactant preparation for food consists of a hydrophilic powdery **colloidal** solid with a particle size <20 mesh and composed of, preferably, 70-98% of a sugar or sugar alc. **dispersing** medium, 1-15% of a surface-active agent (**fatty acid esters of glycerol**, propylene glycol, sucrose, **sorbitan**, or a lecithin), and 0-20% of an edible oil or fat. Thus, 3572 g 70% sorbitol [50-70-4] was heated to 70° and 120 g cottonseed-oil **fatty acid monoglycerides** and 80 g **sorbitan** monostearate [1338-41-6] were added, stirred, heated to 95°, dehydrated under reduced pressure, 1500 g sorbitol powder was added as seed crystals, and the mixture was cooled, crystallized, and ground to pass 35 mesh. The surfactant was added to minced fish (pollack) at 4.2% along with other additives to form kamaboko with improved whiteness and storage stability.

IC A23L001-34  
CC 17-2 (Foods)  
ST **emulsifier** sorbitol food; **monoglyceride** sorbitol **emulsifier**; kamaboko **emulsifier**

IT Cottonseed oil  
Lecithins, biological studies  
Rape oil  
Soybean oil  
RL: BIOL (Biological study)  
(**emulsifiers** containing sorbitol and, for food)

IT Bread  
(**emulsifiers** for)

IT **Emulsifying** agents  
(sorbitol-containing, for food)

IT Bakery products  
(cakes, sponge, **emulsifiers** for)

IT **Glycerides**, biological studies  
RL: BIOL (Biological study)  
(**mono-**, **emulsifiers** containing sorbitol and, for food)

IT Fish  
(paste, **emulsifiers** for)

IT Meat  
(sausage, **emulsifiers** for)

IT 50-70-4, biological studies 50-99-7, biological studies 56-81-5, biological studies 57-48-7, biological studies 57-50-1, biological studies 57-55-6, biological studies 63-42-3 69-65-8 69-79-4 585-88-6 1323-39-3 1338-41-6 9005-64-5 26266-58-0 26402-26-6 26545-74-4 31566-31-1 37318-31-3 39300-95-3  
RL: BIOL (Biological study)

(emulsifiers containing, for food)

L68 ANSWER 54 OF 57 HCA COPYRIGHT 2004 ACS on STN

92:145278 Low-fat, whipped cream **composition**. Yamaguchi, Masayuki; Kubota, Hayato; Minami, Yasuo (Fuji Seiyu K. K., Japan). Jpn. Tokkyo Koho JP 54039459 B4 19791128 Showa, 7 pp. (Japanese). CODEN: JAXXAD. APPLICATION: JP 1973-19022 19730215.

AB Low-fat, whipped cream is formulated from oils or fats, phospholipids, **fatty acid monoglycerides**, skim or whole milk, sucrose **fatty acid esters**, casein salts, and gums. The product has high over-run, favorable mouthfeel, and is low in calories. Thus, 28 parts hydrogenated palm oil (m.p. 33.5°) containing 0.4% lecithin, 0.3% **sorbitan** [12441-09-7] **fatty acid ester**, and 0.2% **glycerol monostearate** [31566-31-1] was mixed with 72 parts skim milk containing 1.1% sucrose [57-50-1] **fatty acid ester**. The mixture was heated at 65-70°, mixed with 0.5 and 0.1% Na caseinate and gum, resp., homogenized, and pasteurized to yield whipped cream.

IC A23L001-19

CC 17-3 (Foods)

ST whipped cream substitute prepn; **emulsifier** whipped cream

IT Lecithins, biological studies

RL: BIOL (Biological study)

(**emulsifier**, for whipped cream substitutes)

IT Cream substitutes

(whipped, **emulsifiers** for)

IT 57-50-1D, **fatty acid esters** 12441-09-7D,

**fatty acid esters** 31566-31-1

RL: BIOL (Biological study)

(**emulsifier**, for whipped cream substitute)

L68 ANSWER 55 OF 57 HCA COPYRIGHT 2004 ACS on STN

81:24426 Stable liquid **emulsifier compositions**. Langhans, Roy K.; Sunshine, Gary A. (ICI Americas, Inc.). U.S. US 3795627 19740305, 4 pp. (English). CODEN: USXXAM. APPLICATION: US 1971-150194 19710604.

AB A temperature-stable, clear liquid **emulsifer** for continuous metering into bakery shortening or directly into bread dough or sponge for batch methods of baking was prepared by mixing 5-90% **fatty acid monoesters** of propylene glycol, 0-85% **monoglyceride**, 10-80% polyoxyethyleneated **fatty acid esters** of **glycerol**, hexitol, hexitan, or isohexide. The preferred hexitol, hexitan, or isohexide is sorbitol or its derivs. Thus, an **emulsifier** was prepared from 48% **glycerol esters** of unsatd. tallow acids (54%  $\alpha$ - **monoester** and 89% unsatd.), 12% Prodendro Emersol 233LL, and 40% polyoxyethylene(20) **sorbitan monostearate**.

IC B01F

NCL 252356000

CC 17-2 (Foods)

ST **emulsifier** bread dough

IT Dough

(**emulsifiers** for)

IT **Emulsifying agents**

(glyceride and polyethylene oxide condensation products of unsatd. acids, for dough)

IT Linseed oil

RL: BIOL (Biological study)

- (glycerides of **fatty acids** of, of dough **emulsifiers**)
- IT Corn oil  
RL: BIOL (Biological study)  
(glycerides of unsatd. acids of, of dough **emulsifiers**)
- IT Glycerides, biological studies  
RL: BIOL (Biological study)  
(of unsatd. **fatty acids**, as **emulsifiers** for dough)
- IT Cottonseed oil  
Soybean oil  
RL: BIOL (Biological study)  
(propylene glycol esters of unsatd. acids of, of dough **emulsifiers**)
- IT 9005-67-8 9063-33-6 53026-26-9 53026-27-0  
RL: BIOL (Biological study)  
(of dough **emulsifiers**)
- L68 ANSWER 56 OF 57 HCA COPYRIGHT 2004 ACS on STN  
80:26078 **Composite** preventing  $\alpha$ -starch strings from adhering together. Katsumi, Mamoru (Kao Soap Co., Ltd.). Jpn. Tokkyo Koho JP 48007341 B4 **19730305** Showa, 5 pp. (Japanese). CODEN: JAXXAD.  
APPLICATION: JP 1968-64793 19680909.
- AB Adhesion between cooked vermicelli strings may be prevented by dipping the strings into a cooling bath containing 0.2-1.0% of a mixture of an **emulsifier** (sucrose **fatty acid ester** or polyoxyethylene **sorbitan ester**) and an antiadhesion compound (mixts. of **glycerol fatty acid esters**, propylene glycol **fatty acid esters**, and **sorbitan fatty acid esters**). Thus, vermicelli was dipped into a solution containing 0.5% of a composite consisting of 80 parts **glycerol** monostearate and 20 parts of sucrose palmitate-stearate **esters**. The **emulsion** was satisfactory and the vermicelli improved.
- IC A23L  
CC 17-2 (Foods)  
ST vermicelli adhesion prevention; starch adhesion prevention; alimentary paste adhesion prevention; **glycerol** stearate starch adhesion; sucrose stearate starch adhesion; propylene glycol **ester** starch adhesion
- IT **Fatty acids, esters**  
Glycerides, biological studies  
RL: BIOL (Biological study)  
(adhesion of alimentary paste strings prevention by)
- IT Alimentary pastes  
Vermicelli  
(adhesion prevention in, **fatty acid esters** for)
- IT  $\alpha$ -D-Glucopyranoside,  $\beta$ -D-fructofuranosyl, **fatty acid esters**  
RL: BIOL (Biological study)  
(adhesion of alimentary paste strings prevention by)
- IT 1,2-Propanediol, **fatty acid esters**  
**Sorbitan, esters** with **fatty acids**, polyoxyethylene derivs.  
RL: BIOL (Biological study)  
(adhesion prevention of alimentary paste strings by)
- IT 9005-25-8, biological studies

RL: BIOL (Biological study)  
(food products, adhesion prevention in, **fatty acid esters** for)

L68 ANSWER 57 OF 57 HCA COPYRIGHT 2004 ACS on STN

75:33984 Nonionic **emulsives** in food products. 1. Establishment of the **composition** of several currently used **emulsives** by thin-layer chromatography and ir spectrophotometry. Srebrnik, S.; Charon, C. (Inst. Hyg. Epidemiol., Brussels, Belg.). Mitteilungen aus dem Gebiete der Lebensmitteluntersuchung und Hygiene, 61(3-4), 220-54 (French) 1970. CODEN: MGLHAE. ISSN: 0026-6841.

AB An extensive study is described in detail. The **emulsifiers** studied were **monoglycerides**, **sucrose esters**, **sorbitan fatty acid esters**, **fatty acid esters of sorbitan polyoxyethylene**, **fatty acid esters of propylene glycol**. A preliminary examination with ir photometry is discussed. Various chromatog. sepns. are described. The complicated composition of the **emulsifiers** tested was partly explored. An anal. scheme is proposed and tabulated. 31 refs.

CC 17 (Foods)

ST nonionic **emulsifier** food; review **emulsifiers** food; chromatog **emulsifiers**; thin layer chromatog **emulsifiers**; IR photometry **emulsifiers**; photometry IR **emulsifiers**

IT **Emulsifying** agents

(anal. by thin-layer chromatog. and ir spectrophotometry)

IT **Glycerides**, analysis

RL: ANST (Analytical study)

(mono, by ir spectrophotometry and thin-layer chromatog.)

IT 57-50-1D, **Sucrose**, **esters with fatty acids**  
57-55-6D, 1,2-**Propanediol**, **esters with fatty acids** 12441-09-7D, **Sorbitan**, **esters with fatty acids** 12441-09-7D, **Sorbitan**, **esters with fatty acids**, polyoxyethylene derivs.

RL: BIOL (Biological study)

(**emulsifying** agents, anal. of)

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L100 ANSWER 1 OF 16 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 2004-580488 [56] WPIX

DNC C2004-211535

TI **Composition** useful in treatment of protozoal infections e.g.  
equine protozoal myeloencephalitis, comprises diclazuril dissolved in  
**mixture** of alcohol based solvent, **emulsifier** and base.

DC A96 B03 C02

IN DE SPIEGELEER, B; DOSOGNE, H

PA (JANC) JANSSEN PHARM NV

CYC 108

PI WO 2004062673 A1 20040729 (200456)\* EN 22 A61K031-53

RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE

LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE

DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG

KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ

OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG

US UZ VC VN YU ZA ZM ZW

ADT WO 2004062673 A1 WO 2004-EP147 20040109

PRAI WO 2003-EP398 20030116

IC ICM A61K031-53

ICS A61K009-08; A61K047-10; A61K047-18; A61K047-32; A61P033-02

AB WO2004062673 A UPAB: 20040901

NOVELTY - A composition comprises diclazuril dissolved in a mixture  
comprising an alcohol based solvent (A), an emulsifier (E) and a base (B)  
(0.5 - 3 mol equivalents).

ACTIVITY - Protozoacide; Antiparasitic.

MECHANISM OF ACTION - None given.

USE - In the treatment of protozoal infections e.g. Equine Protozoal  
Myeloencephalitis (claimed) and coccidiose; for treatment of parasitic  
protozoa.

ADVANTAGE - The composition avoid the use of solvents with a  
relatively high toxic profile such as dimethylsulfoxide, dimethylformamide  
or tetrahydrofuran which upon dilution with aqueous systems can cause  
precipitation of the active drug substance. The solvent systems have good  
bioavailability and can be tailored for oral, transdermal or parenteral  
administration. The composition is stable upon dilution with aqueous  
system such as artificial gastric fluid and artificial intestinal fluid.  
(A) Has low toxicity and is resistant to precipitation upon dilution with  
aqueous system thus reduces the risk of low and variable bioavailability  
as well as local irritation after parenteral administration. Effective  
plasma concentration can be attained within a short time period after  
administration of the composition leading to rapid entry of diclazuril  
into infected tissue thus the period of treatment is shorter. Smaller  
quantities of diclazuril were required thus the cost of drug is less. The



composition is stable below 25 deg. C and the amount of keto-degradation products of diclazuril can be maintained below 3 %.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: A12-V01; B04-B01C1; B04-C03C; B05-A01A; B05-A01B; B05-C01; B05-C04; B07-D13; B10-A07; B10-B01B; B10-B03B; B10-B04B; B10-E04C; B10-E04D; B12-M03; B14-A03; B14-A03C; B14-S12; C04-B01C1; C04-C03C; C05-A01A; C05-A01B; C05-C01; C05-C04; C07-D13; C10-A07; C10-B01B; C10-B03B; C10-B04B; C10-E04C; C10-E04D; C12-M03; C14-A03; C14-A03C; C14-S12

L100 ANSWER 2 OF 16 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 2004-224100 [21] WPIX

DNC C2004-088335

TI **Composition** useful in cosmetic skin or hair preparation comprises oil-soluble UV absorber, solid lipid, **emulsifier** and liquid lipid or oil-miscible UV absorber.

DC A96 D21 E19

IN HERZOG, B

PA (CIBA) CIBA SPECIALTY CHEM HOLDING INC; (HERZ-I) HERZOG B

CYC 32

PI US 2003235540 A1 20031225 (200421)\* 16 A61K007-42  
EP 1378231 A1 20040107 (200421) EN A61K007-42  
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV  
MC MK NL PT RO SE SI SK TR

ADT US 2003235540 A1 US 2003-460945 20030613; EP 1378231 A1 EP 2003-405419 20030611

PRAI EP 2002-405497 20020617

IC ICM A61K007-42

ICS A61K007-00

AB US2003235540 A UPAB: 20040326

NOVELTY - A solid lipid nanoparticle composition comprises (weight%) oil-soluble UV absorber (a1) (1 - 40), solid lipid (a2) (20 - 98.9), emulsifier (a3) (0.1 - 20) and liquid lipid or oil-miscible UV absorber (a4) (0 - 40).

ACTIVITY - Dermatological.

MECHANISM OF ACTION - None given.

USE - In cosmetic skin, or hair preparation (claimed); as cosmetic and dermatological light-protective formulation; as light protective agent in cosmetic, dermatological, pharmaceutical and veterinary medicine preparation.

ADVANTAGE - The compositions containing lipid or lipid-like material or its mixture have a diameter of 10 nm - 10  $\mu$ m and are solid at room temperature and biologically degradable and in addition contain components that exhibit little or no toxicity. The compositions increase the solubility of moderately soluble UV absorbers that are soluble in cosmetic oils (i.e. UV absorbers have a solubility of greater than 1%) and enable a good cosmetic formulation. The compositions enhance the solubility behavior of oil-soluble UV filters in cosmetic in formulation and thus improve their effectiveness. The penetration of the skin by the UV absorbers is thus reduced, resulting in a positive effect on the toxicological potential of the UV absorbers by incorporating UV absorbers in solid lipid nanoparticle incorporated. The compositions are stable even at relatively high temperatures, can very easily be incorporated into cosmetic and dermatological formulations by replacing a portion of the aqueous phase with the aqueous SLN dispersion.

Dwg.0/0

FS CPI

FA AB; GI; DCN

MC CPI: A12-V04A; A12-V04C; D08-B01; D08-B03; D08-B09A1; E05-E01; E05-E02B;  
E06-A01; E06-D05; E06-D08; E07-A02D; E07-A02H; E07-D13B; E10-A15C;  
E10-A22D; E10-C04H; E10-C04L2; E10-F02A2; E10-G02F1; E10-G02F2;  
E10-G02G2; E10-G02H2A

L100 ANSWER 3 OF 16 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 2001-484035 [53] WPIX

DNC C2001-145309

TI Cosmetic and/or pharmaceutical **formulations**, used as sun screen  
**formulations**, contain ultraviolet light filter and oil component  
and/or **emulsifier** with specified polarity.

DC A96 B07 D21 E19

IN EGGERS, A; KAWA, R

PA (COGN-N) COGNIS DEUT GMBH

CYC 94

PI DE 19956601 A1 20010531 (200153)\* 12 A61K007-42

AU 2001013942 A 20010604 (200153) A61K007-42

WO 2001037798 A1 20010531 (200153) GE A61K007-42

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ  
NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AU AZ BA BB BG BR BY BZ CA CN CR CU CZ DM DZ EE GD GE  
GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LV MA MD  
MG MK MN MW MX MZ NO NZ PL RO RU SD SG SI SK SL TJ TM TR TT TZ UA  
UG US UZ VN YU ZA ZW

ADT DE 19956601 A1 DE 1999-1056601 19991125; AU 2001013942 A AU 2001-13942  
20001116; WO 2001037798 A1 WO 2000-EP11338 20001116

FDT AU 2001013942 A Based on WO 2001037798

PRAI DE 1999-19956601 19991125

IC ICM A61K007-42

AB DE 19956601 A UPAB: 20010919

NOVELTY - Cosmetic and/or pharmaceutical formulations contain:

(a) ultraviolet light filter selected from cinnamic esters and/or  
their water-soluble derivatives, 3,3-diphenylacrylates,  
3-benzylidenecamphor and its derivatives and/or benzoylmethane  
derivatives; and

(b) oil components and/or emulsifiers with a polarity in the 1.0-4.0  
debye range.

USE - The formulations are used as photodegradation inhibitors  
(claimed), i.e. as sun screen formulations.

ADVANTAGE - Sun screen formulations usually contain organic  
ultraviolet (UV) light filters. Butyl methoxydibenzoylmethane is a very  
effective UV-A filter but has only slight photostability and forms  
degradation products of unknown phototoxic potential and possible  
sensitization potential. Combinations with certain UV-B filters, e.g.  
diphenylacrylates, benzylidene-camphor derivatives and cinnamic ester  
derivatives, have high photostability but not the required 100% level. The  
present formulations, based on known filters, have over 98%  
photostability. The combination of special UV filters with cosmetic  
components of defined polarity is more effective than the filters alone  
and makes the formulations more stable, whereas mixtures with substances  
of lower polarity makes the photostability even lower.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: A12-V01; A12-V04C; B10-F02; B10-G02; B14-R05; D08-B09A; E05-G09C;  
E05-G09D; E07-A02A; E07-A02D; E07-A02H; E10-A07; E10-A11B2; E10-E04G;  
E10-E04J; E10-E04K; E10-E04L; E10-E04M1; E10-E04M3; E10-F02A1;

E10-F02A2; E10-G02F1; E10-G02G2; E10-G02H2; E10-H01E; E10-J02A2

L100 ANSWER 4 OF 16 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
AN 2001-410023 [44] WPIX  
DNC C2001-124368  
TI Surfactant **composition**, used as **emulsifier** or **dispersant**, additive to conventional anionic surfactants or additive to shampoo and skin cleansing **formulations**, comprises combination or gemini surfactant and co-amphiphilic.  
DC A25 A82 A96 A97 B07 C07 D21 E19 G02  
IN DAHMS, G H; KWETKAT, K  
PA (SASO-N) SASOL GERMANY GMBH; (SASO-N) SASOL DEUT CO LTD; (RHWL) RWE-DEA MINERALOEL & CHEM AG; (DAHM-I) DAHMS G H; (KWET-I) KWETKAT K  
CYC 30  
PI DE 19943668 A1 20010315 (200144)\* 27 C11D001-83  
AU 2000076444 A 20010417 (200144) C11D001-28  
WO 2001019945 A1 20010322 (200144) GE C11D001-28  
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
W: AU BR CN JP US  
EP 1141187 A1 20011010 (200167) GE C11D001-28  
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
RO SE SI  
BR 2000007147 A 20011016 (200170) C11D001-28  
CN 1327474 A 20011219 (200226) C11D001-28  
JP 2003509571 W 20030311 (200319) 63 C11D001-00  
US 6710022 B1 20040323 (200421) C11D001-00  
US 2004176266 A1 20040909 (200459) D06L001-00  
ADT DE 19943668 A1 DE 1999-1043668 19990913; AU 2000076444 A AU 2000-76444 20000913; WO 2001019945 A1 WO 2000-DE3162 20000913; EP 1141187 A1 EP 2000-965841 20000913; WO 2000-DE3162 20000913; BR 2000007147 A BR 2000-7147 20000913; WO 2000-DE3162 20000913; CN 1327474 A CN 2000-802220 20000913; JP 2003509571 W WO 2000-DE3162 20000913; JP 2001-523717 20000913; US 6710022 B1 WO 2000-DE3162 20000913; US 2001-831796 20010813; US 2004176266 A1 Cont of WO 2000-DE3162 20000913, Cont of US 2001-831796 20010813, US 2004-798164 20040310  
FDT AU 2000076444 A Based on WO 2001019945; EP 1141187 A1 Based on WO 2001019945; BR 2000007147 A Based on WO 2001019945; JP 2003509571 W Based on WO 2001019945; US 6710022 B1 Based on WO 2001019945; US 2004176266 A1 Cont of US 6710022  
PRAI DE 1999-19943668 19990913  
IC ICM C11D001-00; C11D001-28; C11D001-83; D06L001-00  
ICS A61K007-00; A61K007-075; A61K007-50; B01F017-00; C11D001-04; C11D001-10; C11D001-34; C11D001-52; C11D001-90; C11D003-26; C11D003-30; C11D003-43; C11D003-44  
AB DE 19943668 A UPAB: 20020306  
NOVELTY - Surfactant composition contains 1-70, preferably 10-60 weight% gemini (dimeric) surfactant(s) (I) and the rest co-amphiphilic(s) (II), with an HLB (hydrophilic-lipophilic balance) value less than or equal to 6, with respect to the sum of components (I) and (II).  
ACTIVITY - Dermatological.  
MECHANISM OF ACTION - None given.  
USE - The composition is used as emulsifier or dispersant, as additive to conventional anionic surfactants or as additive to shampoo and skin cleansing formulations (all claimed). It is useful for formulating oil/water, water/oil and micro-emulsions, e.g. for use in a wide range of cosmetics and personal cleansers, dermatological formulations, agrochemicals, lacquers, paints, primers, (printing) inks and pharmaceuticals, e.g. controlled release formulations.

ADVANTAGE - Direct substitution of conventional surfactants with gemini surfactants does not yield the expected large increase in surface activity and does not warrant the additional cost. Combinations with co-amphiphilics not also optimize the application properties but also have a high multifunctionality and are even more effective than mixtures of conventional (non-gemini) surfactants and co-amphiphilics. As an example, the mixture makes it possible to disperse a hydrophilic pigment in an oil phase and also an aqueous phase or a hydrophobic pigment in an oil phase or aqueous phase.

Dwg.0/2

FS

CPI

FA

AB; DCN

MC

CPI: A10-E01; A12-V04A; A12-V04B; A12-W12B; A12-W12C; B04-C03C; B04-C03D; B05-B01G; B06-H; B07-H; B10-A07; B10-A09A; B10-A10; B10-A21; B10-B01B; B10-B02B; B10-B02J; B10-E04C; B12-M09; B14-N17; B14-R01; C04-C03C; C04-C03D; C05-B01G; C06-H; C07-H; C10-A07; C10-A09A; C10-A10; C10-A21; C10-B01B; C10-B02B; C10-B02J; C10-E04C; C12-M09; C14-N17; C14-R01; D08-B04; D08-B09A; E05-G03D; E05-G09B; E05-G09D; E07-A02D; E10-A07; E10-A09B8; E10-A12C2; E10-A19B; E10-B01E; E10-C03; E10-C04; E10-C04C; E10-D03A; E10-E04G; E10-E04K; E10-E04L4; E10-E04L5; E10-G02G2; G02-A03

L100 ANSWER 5 OF 16 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 2001-080926 [09] WPIX

DNC C2001-023369

TI Oral micro-emulsion composition comprises Carduus marianus extract, silybin or its derivative, organic solvent, surfactant and oil and provides high in vivo bioavailability of silybin and protects liver cells from harmful effects.

DC A96 B02

IN SUH, H J; WOO, J S; SEO, H J; SUH, H; WOO, J

PA (HANM-N) HANMI PHARM CO LTD; (SUHH-I) SUH H; (WOOJ-I) WOO J; (HANM-N) HANMY PHARM CO LTD

CYC 29

PI WO 2001001961 A1 20010111 (200109)\* EN 14 A61K009-107

RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

W: CN JP US

EP 1109532 A1 20010627 (200137) EN A61K009-107

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT

RO SE SI

US 2001005726 A1 20010628 (200138) A61K035-78

KR 2001008804 A 20010205 (200152) A61K035-78

CN 1316898 A 20011010 (200207) A61K009-107

US 6428821 B2 20020806 (200254) A61K035-78

KR 342942 B 20020702 (200302) A61K035-78

JP 2003503441 W 20030128 (200309) 17 A61K009-107

ADT WO 2001001961 A1 WO 2000-KR720 20000705; EP 1109532 A1 EP 2000-941017

20000705, WO 2000-KR720 20000705; US 2001005726 A1 Cont of WO 2000-KR720

20000705, US 2001-775704 20010202; KR 2001008804 A KR 1999-26809 19990705;

CN 1316898 A CN 2000-801319 20000705; US 6428821 B2 Cont of WO 2000-KR720

20000705, US 2001-775704 20010202; KR 342942 B KR 1999-26809 19990705; JP

2003503441 W WO 2000-KR720 20000705, JP 2001-507456 20000705

FDT EP 1109532 A1 Based on WO 2001001961; KR 342942 B Previous Publ. KR

2001008804; JP 2003503441 W Based on WO 2001001961

PRAI KR 1999-26809 19990705

IC ICM A61K009-107; A61K035-78

ICS A01N037-18; A01N065-00; A61K031-357; A61K047-10; A61K047-12;

A61K047-16; A61K047-20; A61K047-22; A61K047-24; A61K047-28;

A61K047-34; A61K047-44; A61P001-16

AB WO 200101961 A UPAB: 20010213  
NOVELTY - An oral micro-emulsion composition comprises Carduus marianus extract, a silybin or its derivative, an organic solvent, a surfactant and an oil and provides high in vivo bioavailability of silybin and is useful for protecting liver cells from harmful effects.  
USE - The composition is useful for protecting the liver cells from harmful effects of drinking, smoking, overworking, environmental contaminants, stress or liver damage drugs.  
ADVANTAGE - The oral composition provides improved in vivo bioavailability of silybin which has excellent liver cells protecting effect.  
Dwg.0/1

FS CPI  
FA AB; DCN  
MC CPI: A12-V01; B04-B01B; B04-B01C; B04-C03C; B05-B01P; B06-A01; B06-A02; B07-A02A; B07-A04; B10-E04C; B10-E04D; B12-M03; B12-M09; B14-N12

L100 ANSWER 6 OF 16 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
AN 2000-039238 [03] WPIX  
DNC C2000-010237  
TI Water-in-oil (W/O) type emulsified fat composition for use as a margarine, fat spread.  
DC D13 E13 E17  
IN MASUI, K; MORI, H; TANAKA, Y; YASUKAWA, T  
PA (KAOS) KAO CORP  
CYC 22

PI WO 9959422 A1 19991125 (200003)\* EN 20 A23D007-00  
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
W: BR CA CN SG  
BR 9815821 A 20010130 (200110) A23D007-00  
EP 1079699 A1 20010307 (200114) EN A23D007-00  
R: DE DK FI FR GB IT NL SE  
CN 1292644 A 20010425 (200143) A23D007-00  
EP 1079699 B1 20020109 (200211) EN A23D007-00  
R: DE DK FI FR GB IT NL SE  
DE 69803491 E 20020228 (200223) A23D007-00

ADT WO 9959422 A1 WO 1998-JP2227 19980521; BR 9815821 A BR 1998-15821 19980521, WO 1998-JP2227 19980521; EP 1079699 A1 EP 1998-921745 19980521, WO 1998-JP2227 19980521; CN 1292644 A CN 1998-814052 19980521, WO 1998-JP2227 19980521; EP 1079699 B1 EP 1998-921745 19980521, WO 1998-JP2227 19980521; DE 69803491 E DE 1998-603491 19980521, EP 1998-921745 19980521, WO 1998-JP2227 19980521

FDT BR 9815821 A Based on WO 9959422; EP 1079699 A1 Based on WO 9959422; EP 1079699 B1 Based on WO 9959422; DE 69803491 E Based on EP 1079699, Based on WO 9959422

PRAI WO 1998-JP2227 19980521  
IC ICM A23D007-00

AB WO 9959422 A UPAB: 20000118  
NOVELTY - The oily phase of an emulsified fat composition contains a high concentration of diglycerides containing a solid fat, and which is stable and has excellent spreadability.  
DETAILED DESCRIPTION - A water-in-oil emulsified fat composition comprises an oily phase and an aqueous phase. The oily phase comprises 40 weight % (weight%) to less than 95 weight% of diglycerides and 5 weight% to less than 60 weight% of triglycerides and satisfies both the requirements (1) and (2):

(1) the **glycerides** comprise 0.5 weight% to less than 20 weight% of SS components, 20 weight% to less than 55 weight% of SU components

S = 14-22C saturated fatty acid;

U = 14-22C unsaturated fatty acid

; and (2) a weight ratio of total 14C and 16C saturated fatty acid contained in the **glycerides** to total 18C, 20C, and 22C saturated fatty acid contained in the diglycerides is 1-8, preferably 2-7.

The total of %SS + %SU + %UU = 100.

USE - The invention is used as margarine, fat spread, etc.

ADVANTAGE - The composition is stable and has excellent spreadability. The composition is also effective in inhibiting body fat accumulation, in a high concentration.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: D03-C; D03-C01; D03-C02; E10-E04K; E10-G02G2

L100 ANSWER 7 OF 16 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 1999-602295 [52] WPIX

DNC C1999-175402

TI Cosmetic and/or pharmaceutical **compositions** which allow formation of stable **emulsions**, enhance skin-care and protect the **compositions** against oxidative degradation.

DC A96 B04 D16 D21 E19

IN HOERNER, V; KUEHNE, S; WACHTER, R

PA (HENK) HENKEL KGAA; (COGN-N) COGNIS DEUT GMBH; (COGN-N) COGNIS DEUT GMBH & CO KG

CYC 20

PI DE 19815090 A1 19991014 (199952)\* 12 A61K007-48

WO 9951200 A1 19991014 (199952) GE A61K007-48

RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

W: JP US

EP 1069884 A1 20010124 (200107) GE A61K007-48

R: DE ES FR IT

JP 2002510610 W 20020409 (200227) 37 A61K007-48

EP 1069884 B1 20020925 (200271) GE A61K007-48

R: DE ES FR IT

DE 59902845 G 20021031 (200279) A61K007-48

ES 2183534 T3 20030316 (200325) A61K007-48

ADT DE 19815090 A1 DE 1998-1015090 19980406; WO 9951200 A1 WO 1999-EP2115 19990327; EP 1069884 A1 EP 1999-913311 19990327, WO 1999-EP2115 19990327; JP 2002510610 W WO 1999-EP2115 19990327, JP 2000-541972 19990327; EP 1069884 B1 EP 1999-913311 19990327, WO 1999-EP2115 19990327; DE 59902845 G DE 1999-502845 19990327, EP 1999-913311 19990327, WO 1999-EP2115 19990327; ES 2183534 T3 EP 1999-913311 19990327

FDT EP 1069884 A1 Based on WO 9951200; JP 2002510610 W Based on WO 9951200; EP 1069884 B1 Based on WO 9951200; DE 59902845 G Based on EP 1069884, Based on WO 9951200; ES 2183534 T3 Based on EP 1069884

PRAI DE 1998-19815090 19980406

IC ICM A61K007-48

ICS A61K007-00; A61K007-027; A61K031-7105; A61K031-711; A61P017-00

AB DE 19815090 A UPAB: 19991210

NOVELTY - Cosmetic and/or pharmaceutical compositions contain nucleic acids, emulsifiers and oils.

ACTIVITY - None given.

MECHANISM OF ACTION - None given.

USE - None given.

ADVANTAGE - The nucleic acids are stated to allow formation of stable emulsions, to enhance the skin-care and moisture binding properties of natural substances, to protect the skin from inflammatory reactions, and to protect the compositions against oxidative degradation (no data given).

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: A12-V01; A12-V04C; B04-B01B; B04-B01C1; B04-C02X; B04-C03C; B04-C03D; B04-E01; B05-B01P; B07-A02; B10-A11B; B10-A22; B10-E04C; B10-E04D; B10-G02; B10-H01; B10-J02; B12-M09; B14-N17; B14-R01; D05-H12; D08-B09A; E07-A02; E07-A02D; E10-A07; E10-A11B2; E10-C04; E10-E04; E10-G02; E10-J02A2

L100 ANSWER 8 OF 16 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 1999-571590 [48] WPIX

DNC C1999-166760

TI **Composition** in form of oral (micro)emulsion  
preconcentrate used to treat e.g. autoimmune or inflammatory conditions.

DC A23 A25 A28 A96 B03 B05

IN AMBUEHL, M; HAEBERLIN, B; LUECKEL, B; MEINZER, A; RICHTER, F; AMBUHL, M; HABERLIN, B; LUCKEL, B

PA (NOVS) NOVARTIS AG; (NOVS) NOVARTIS-ERFINDUNGEN VERW GES MBH; (NOVS) NOVARTIS PHARMA GMBH; (AMBU-I) AMBUHL M; (HABE-I) HABERLIN B; (LUCK-I) LUCKEL B; (MEIN-I) MEINZER A; (RICH-I) RICHTER F

CYC 86

PI WO 9944584 A1 19990910 (199948)\* EN 50 A61K009-107  
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL  
OA PT SD SE SL SZ UG ZW  
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD  
GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV  
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
UA UG US UZ VN YU ZW

FR 2775596 A1 19990910 (199948) A61K009-107

ZA 9901789 A 19991027 (199951) 46 A61K000-00

AU 9928361 A 19990920 (200007) A61K009-107

BE 1012400 A5 20001003 (200053) A61K000-00

NO 2000004299 A 20000829 (200058) A61K009-107

BR 9908597 A 20001114 (200064) A61K009-107

GB 2350791 A 20001213 (200066) A61K038-13

CZ 2000003222 A3 20001213 (200103) A61K009-107

EP 1059913 A1 20001220 (200105) EN A61K009-107

R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU NL PT RO SE SI

DE 19983012 T 20010201 (200108) A61K009-107

SK 2000001319 A3 20010212 (200112) A61K009-107

FR 2800277 A1 20010504 (200128) A61K009-107

CN 1292684 A 20010425 (200143) A61K009-107

HU 2001001080 A2 20010828 (200157) A61K009-107

KR 2001041657 A 20010525 (200168) A61K009-107

MX 2000008735 A1 20010301 (200170) A61K031-435

JP 2002505271 W 20020219 (200216) 60 A61K038-00

BE 1013423 A5 20020115 (200236) A61K000-00

BE 1013648 A5 20020507 (200241) A61K000-00

AU 749217 B 20020620 (200252) A61K009-107

IT 1313550 B 20020909 (200305) A61K009-00

GB 2350791 B 20030402 (200325) A61K038-13

GB 2380673 A 20030416 (200328) A61K038-13

GB 2380674 A 20030416 (200328) A61K038-13

GB 2380673 B 20030528 (200336) A61K038-13  
GB 2380674 B 20030528 (200336) A61K038-13  
EP 1354582 A2 20031022 (200370) EN A61K009-107  
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU NL PT RO SE SI  
US 2003216303 A1 20031120 (200377) A61K038-13  
NZ 506644 A 20040227 (200418) A61K009-107  
JP 2004189753 A 20040708 (200445) 29 A61K031-436  
EP 1059913 B1 20040929 (200464) EN A61K009-107  
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU NL PT RO SE SI  
FR 2853546 A1 20041015 (200467) A61K009-107  
RU 2235554 C2 20040910 (200468) A61K038-13  
ADT WO 9944584 A1 WO 1999-EP1415 19990304; FR 2775596 A1 FR 1999-2748  
19990304; ZA 9901789 A ZA 1999-1789 19990305; AU 9928361 A AU 1999-28361  
19990304; BE 1012400 A5 BE 1999-153 19990304; NO 2000004299 A WO  
1999-EP1415 19990304, NO 2000-4299 20000829; BR 9908597 A BR 1999-8597  
19990304, WO 1999-EP1415 19990304; GB 2350791 A WO 1999-EP1415 19990304,  
GB 2000-21495 20000901; CZ 2000003222 A3 WO 1999-EP1415 19990304, CZ  
2000-3222 19990304; EP 1059913 A1 EP 1999-908952 19990304, WO 1999-EP1415  
19990304; DE 19983012 T DE 1999-1083012 19990304, WO 1999-EP1415 19990304;  
SK 2000001319 A3 WO 1999-EP1415 19990304, SK 2000-1319 19990304; FR  
2800277 A1 Div ex FR 1999-2748 19990304, FR 2000-13782 20001025; CN  
1292684 A CN 1999-803746 19990304; HU 2001001080 A2 WO 1999-EP1415  
19990304, HU 2001-1080 19990304; KR 2001041657 A KR 2000-709861 20000906;  
MX 2000008735 A1 MX 2000-8735 20000906; JP 2002505271 W WO 1999-EP1415  
19990304, JP 2000-534187 19990304; BE 1013423 A5 BE 1999-732 19991109; BE  
1013648 A5 BE 2000-520 20000818; AU 749217 B AU 1999-28361 19990304; IT  
1313550 B IT 1999-MI452 19990305; GB 2350791 B WO 1999-EP1415 19990304, GB  
2000-21495 20000901; GB 2380673 A Div ex GB 2000-21495 20000901, GB  
2002-29284 20021216; GB 2380674 A Div ex GB 2000-21495 20000901, GB  
2002-29289 20021216; GB 2380673 B Div ex GB 2000-21495 20000901, GB  
2002-29284 20021216; GB 2380674 B Div ex GB 2000-21495 20000901, GB  
2002-29289 20021216; EP 1354582 A2 Div ex EP 1999-908952 19990304; EP  
2003-13016 19990304; US 2003216303 A1 Cont of WO 1999-EP1415 19990304,  
Cont of US 2000-623267 20001101, US 2003-465697 20030619; NZ 506644 A NZ  
1999-506644 19990304, WO 1999-EP1415 19990304; JP 2004189753 A Div ex JP  
2000-534187 19990304, JP 2004-62679 20040305; EP 1059913 B1 EP 1999-908952  
19990304, WO 1999-EP1415 19990304, Related to EP 2003-13016 19990304; FR  
2853546 A1 FR 2004-3163 20040326; RU 2235554 C2 WO 1999-EP1415 19990304,  
RU 2000-125560 19990304  
FDT AU 9928361 A Based on WO 9944584; BR 9908597 A Based on WO 9944584; GB  
2350791 A Based on WO 9944584; CZ 2000003222 A3 Based on WO 9944584; EP  
1059913 A1 Based on WO 9944584; DE 19983012 T Based on WO 9944584; HU  
2001001080 A2 Based on WO 9944584; JP 2002505271 W Based on WO 9944584; AU  
749217 B Previous Publ. AU 9928361, Based on WO 9944584; GB 2350791 B  
Based on WO 9944584; EP 1354582 A2 Div ex EP 1059913; NZ 506644 A Based on  
WO 9944584; EP 1059913 B1 Related to EP 1354582, Based on WO 9944584; RU  
2235554 C2 Based on WO 9944584  
PRAI GB 1998-5199 19980311; GB 1998-4742 19980306;  
GB 1998-5104 19980310  
IC ICM A61K000-00; A61K009-00; A61K009-107; A61K031-435; A61K031-436;  
A61K038-00; A61K038-13  
ICS A61K009-48; A61K031-201; A61K031-225; A61K031-23; A61K031-25;  
A61K031-4015; A61K031-7048; A61K047-10; A61K047-12; A61K047-14;  
A61K047-22; A61K047-34; A61P029-00; A61P031-04; A61P035-00;  
A61P037-02; A61P037-06; A61P041-00; C07K000-00  
AB WO 9944584 A UPAB: 20030813  
NOVELTY - Composition in the form of an emulsion or  
microemulsion pre-concentrate comprises a cyclosporin or macrolide and



carrier medium comprising a lipophilic component, surfactant and e.g. triethyl citrate or acetyl triethyl citrate.

**DETAILED DESCRIPTION** - Composition in the form of an **emulsion** or microemulsion pre-concentrate comprises a cyclosporin or macrolide and a carrier medium comprising a second component, lipophilic component and surfactant.

The second component comprises triethyl citrate or acetyl triethyl citrate, polyethylene glycol **glycerol** 6-10C **fatty acid ester**, glyceryl di 6-16C **fatty acid ester**, glyceryl mono 6-14C **fatty acid ester**, a mixture of **mono-** and **di-glycerides** of 6-16C fatty acids, propylene glycol mono 6-12C **fatty acid ester**, N-methyl pyrrolidone, **fatty acids** and alcohols, **glycerol** triacetate, benzyl alcohol and alkylene **polyol** ether or **ester**.

The composition is free of ethanol when the second component comprises triethyl citrate or is free of 6-12C fatty acid triglyceride when the second component comprises a mixture of **mono-** and **di-glycerides** of 8-10C fatty acids.

**ACTIVITY** - Antitumour; antifungal; antiinflammatory.

**USE** - Used to reduce variability of bioavailability levels of a cyclosporin or macrolide for patients during cyclosporin or macrolide therapy (claimed) and for treatment and prevention of autoimmune or inflammatory conditions and transplant rejection, and for treatment of multi-drug resistance (claimed). The composition is used to treat and prevent organ or tissue transplant rejection e.g. in recipients of heart, lung, combined heart-lung, liver, kidney, pancreatic, skin or corneal transplants, for prevention of graft-versus-host disease such as after bone-marrow transplantation, treatment and prevention of autoimmune diseases and inflammatory conditions, particularly those with etiology including autoimmune component, e.g. arthritis (rheumatoid arthritis, arthritis chronic progrediente, arthritis deformans) and rheumatic diseases. The composition is also used as an anti-tumor and antifungal agent when a macrolide is used.

**ADVANTAGE** - The composition has good bioavailability characteristics and reduced variability in inter- and intra-patient bioavailability. The cyclosporine or macrolide has high solubility e.g. 20-50% in the second component. Absorption and blood levels are more predictable, reducing or eliminating problems in administration with erratic absorption. The composition is effective with tenside materials e.g. bile salts, present in the gastrointestinal tract, so that it is fully dispersible in aqueous systems comprising natural tensides can form a microemulsion system in vivo and does not exhibit precipitation of active ingredient or other disruption of fine particulate structure.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: A05-E01D; A05-H01B; A10-E07; A12-V01; B02-Z; B04-B01C1; B04-C01C; B04-C03C; B04-N03A; B07-D03; B10-C04E; B10-E04; B10-G02; B12-M03; B12-M09; B14-A04; B14-C03; B14-C06; B14-C09; B14-G02C; B14-G02D; B14-H01

L100 ANSWER 9 OF 16 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 1998-152778 [14] WPIX

DNC C1998-049169

TI Foaming type oil in water type **emulsified composition**

- contains fat containing mixed acid group tri **glyceride** and **emulsifier** comprising **sorbitan fatty**

**acid ester** and/or poly-glycerine fatty ester, etc..

DC D13  
PA (KAOS) KAO CORP  
CYC 1  
PI JP 10023873 A 19980127 (199814)\* 6 A23L001-19 <--  
ADT JP 10023873 A JP 1996-180481 19960710  
PRAI JP 1996-180481 19960710  
IC ICM **A23L001-19**  
ICS A23D007-00  
AB JP 10023873 A UPAB: 19980406  
Foaming type oil in water type emulsified composition contains fat containing 5-70 weight% mixed acid group triglyceride containing at least 1 18C unsaturated fatty acid residue and 1 at least 20C saturated fatty acid residue and emulsifier comprising 0.001-1 weight% **sorbitan fatty acid ester** and/or polyglycerine **fatty acid ester**, 0.05-1 weight% lecithin and/or 0.01-1 weight% glycerine fatty acid monoester.  
USE - The product is used as whipped cream, topping or filling in producing bread or confectionery.  
ADVANTAGE - The product has good whipping property. It can be preserved by freezing without damaging the flavour, texture and appearance.  
Dwg. 0/0  
FS CPI  
FA AB  
MC CPI: D03-H01N

L100 ANSWER 10 OF 16 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
AN 1997-364271 [34] WPIX  
CR 2000-292468 [25]  
DNC C1997-116764  
TI **Composition** used as shortening substitute in bakery - comprises **emulsion** having water and konjac in the aqueous phase and lipid and **emulsifiers** in the lipid phase and gives low fat products with same characteristics as conventional products.

DC A97 D11  
IN CROSBY, G A; YOUNG, T J  
PA (FMCC) FMC CORP  
CYC 1  
PI CA 2188331 A 19970420 (199734)\* 41 A23L001-307 <--  
ADT CA 2188331 A CA 1996-2188331 19961021  
PRAI US 1995-545414 19951019  
IC ICM **A23L001-307**  
ICS A23D009-00; **A23L001-035**  
AB CA 2188331 A UPAB: 20000524  
A composition (I) comprises an **emulsion** having an aqueous phase containing water and konjac as gelling agent, and a lipid phase containing lipid and emulsifier.  
Also claimed are: (i) a bakery product containing (I); and (ii) method of preparing (I).  
Preferably, the konjac is used with a hydrocolloid or equivalent, such as microcrystalline cellulose, xanthan, sodium, calcium or potassium alginate, locust bean gum, carageenan, propylene glycol alginate, carboxymethyl cellulose, methyl cellulose, hydroxymethyl cellulose, guar gum, karaya gum, gum arabic, starch, pectin, inulin, maltodextrin or gelatin. The lipid is vegetable or animal fat or oil or a mixture and forms 1-30 weight% of the **emulsion**. The emulsifiers are selected from **mono-** and **di-glycerides** of fatty acids,

ethoxylated monoglycerides, **polyglycerol fatty acid esters**, sucrose **fatty acid ester esters** or polyesters, **sorbitan fatty acid esters**, ethoxylated **sorbitan fatty acid esters** or proteinaceous emulsifiers.

USE - The composition is useful as shortening substitute in bakery applications (claimed).

ADVANTAGE - Low fat bakery products obtained using (I) as shortening substitute have physical and sensory characteristics of products made using conventional shortening. (Konjac is a neutral polysaccharide, a glucomannan polymer).

Dwg.0/0

FS CPI

FA AB

MC CPI: A12-W09; D01-B

L100 ANSWER 11 OF 16 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 1995-254409 [33] WPIX

CR 1992-365895 [44]; 1994-263240 [32]; 1995-005785 [01]

DNC C1995-116276

TI Fat substitute **compsn.** used as anti laxative agent - comprising edible non digestible fat substitute and **emulsifier** as anti-laxative agent, used in food to reduce calories and cholesterol.

DC D13

IN CAMPBELL, M L; MEYER, R S

PA (CURT-N) CURTICE BURNS FOODS INC

CYC 1

PI US 5431949 A 19950711 (199533)\* EN 10 A23D007-005

ADT US 5431949 A CIP of US 1991-677553 19910329, CIP of US 1992-857063 19920324, CIP of US 1992-941711 19920908, Cont of US 1993-138630 19931015, US 1994-298024 19940829

FDT US 5431949 A CIP of US 5294451, CIP of US 5338564, Cont of US 5366753

PRAI US 1993-138630 19931015; US 1991-677553 19910329;

US 1992-857063 19920324; US 1992-941711 19920908;

US 1994-298024 19940829

IC ICM A23D007-005

AB US 5431949 A UPAB: 19950824

Fat substitute **compsn.** comprises: (a) an edible, non-digestible fat substitute material having a m pt. of at most 37deg.C; in combination with (b) an anti-laxative agent selected from non-liq,. polyglyceryl esters, non-liquid 1-18C fatty acid **mono-** and **di-glycerides**; ethoxylated **mono-** and **di-glycerides**, **sorbitan** esters of at least one 1-18C **fatty acid**, glyceryl-lacto **esters** of at least one 1-18C fatty acid and digestible **polyol** fatty acid polyesters having up to 3 fatty acid gps. The **polyol** is a 4-8 hydroxy sugar or sugar alcohol. Each acid gp. has 8-18C atoms. The anti-laxative agent is present in an amount to reduce leakage of the non-digestible fat substitute material through the anal sphincter of a mammal. Also claimed is a method of reducing anal leakage in a mammal after ingesting a food **compsn.** comprising an edible, non-digestible fat substitute material having a m. pt. of at most 37deg.C, which comprises incorporating into the food **compsn.** emulsifier selected from non-liquid polyglyceryl esters, non-liquid 1-18C fatty acid **mono-** and **di-glycerides**, ethoxylated 1-18C fatty acid **mono-** and **di-glycerides**, **sorbitan** esters of at least one 1-18C **fatty acid**, glyceryl-lacto **esters** of

at least one 1-18C fatty acid and digestible **polyol** fatty acid polyesters having up to 3 fatty acid gps. The **polyol** is a 4-8 hydroxyl sugar or sugar alcohol. Each acid gp. has 8-18C atoms.

The anti-laxative agent is pref. a non-liquid 1-18C fatty acid **mono-** or **di-glyceride**. It forms more than 5-10 weight% of the substitute material.

ADVANTAGE - The compsn. reduces calories and cholesterol and is therefore healthier to eat. It has a relatively low solids content so it does not feel waxy in the mouth. The compsn. also has a reduced laxative effect.

Dwg.0/0

FS CPI  
FA AB  
MC CPI: D03-C

L100 ANSWER 12 OF 16 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 1991-353119 [48] WPIX

DNC C1992-000023

TI Preparation of particulate flowable flavours - by chilling a **blend** of an encapsulating agent and **emulsifier** mixture with an aqueous flavour **compsn.** and texture conditioning agent mixture.

DC A97 D13

IN KANG, Y C; KING, C K; SCHULMAN, M; SUDOL, M A; TAN, C T

PA (INFL) INT FLAVORS & FRAGRANCES INC

CYC 1

PI US 5064669 A 19911112 (199148)\*

ADT US 5064669 A US 1991-681479 19910403

PRAI US 1989-407356 19890914; US 1991-681479 19910403

IC **A23L001-22**

AB US 5064669 A UPAB: 19930928

Flavouring powders are prepared by: (a) melting and mixing a mixture of a solid encapsulating material (I) (m.pt. 130-195 deg.F) and 1 or more emulsifiers (II); (b) mixing the melt with a blend of 1 or more H2O-containing flavour compsns. (III) (at least 15% H2O) and a texture conditioning agent (IV); and (c) chilling the resulting homogeneous **emulsion** to provide the above particulate flavouring powder. (IV) is SiO2, powdered cellulose, puffed dextrin, maltodextrin, or pregelatinised starch.

Pref. (I) are fats or waxes, especially hydrogenated or partially hydrogenated vegetable oil, stearin, fatty **glyceride** ester or partial ester, or edible wax, partic. a partially hydrogenated cottonseed or soybean or palm oil, a glyceryl monostearate or monopalmitate, a propylene glycol monostearate, a **polyglycerol** stearate, a polyoxyethylene **sorbitol**, a **fatty acid ester** of polyoxyethylene **sorbitan**, a **polyglycerol ester** of a **fatty acid**, beeswax or carnauba wax. Pref. (II) are mono- or diglycerides of fatty acids. Pref. (III) compsns. contain 15-50%, especially 30-50% H2O, and amount

is 20-40% of the (I)-(IV) mixture Amount of (IV) is pref. 0.1-1 times the amount of

(III) compsn. Chilling in step (c) is pref. by spraying into a gas stream of temperature 40-116 deg.F (e.g. through a centrifugal atomiser), or by contact

with a surface of temperature less than the m.pt. of (I) to form flakes (which are then pref. passed through a No.10 screen).

USE/ADVANTAGE - The method allows aqueous flavours to be converted into readily usable powder form, while the prod. retains the flavour and most of the H2O. No thermal damage is done to subtle flavour compsns. and it

retains its original stability. No caking of the favour powder occurs.  
The prod. is useful for providing flavour for microwave foods.  
(Previously notified in week 9148) @ (12pp Dwg.No.0/9)@

FS CPI

FA AB

MC CPI: A03-A01; A12-W09; D03-H01C; D03-H01D; D06-H

L100 ANSWER 13 OF 16 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 1990-235417 [31] WPIX

DNC C1990-101817

TI New oil-water **emulsion** - is obt'd. by mixing edible-oil fatty  
acid tri **glyceride, glycerol fatty**  
**acid ester**, stabiliser and natural tocopherol.

DC D13 D23

PA (UNOS-N) UNO SHOYU KK

CYC 1

PI JP 02163197 A 19900622 (199031)\* 10

JP 2701897 B2 19980121 (199808) 10 C11B005-00

ADT JP 02163197 A JP 1988-316339 19881216; JP 2701897 B2 JP 1988-316339  
19881216

FDT JP 2701897 B2 Previous Publ. JP 02163197

PRAI JP 1988-316339 19881216

IC **A23L001-00**; A23L003-35; C11B005-00

ICM C11B005-00

ICS A23L003-35; B01J013-00; C09K015-08

ICA A23D007-00; A23L001-00; A23L001-24; A23L001-31; A23L001-325; A23L001-40

AB JP 02163197 A UPAB: 19930928

New O/W **emulsion** contg.natural tocopherol is made by mixing,  
with stirring, 5.75-14.60 weight% (based on amount of natural tocopherol) of  
edible-oil middle-chain fatty acid triglyceride, 3.0-9.9 weight% of  
**polyglycerol-, glycerol- and sorbitan-**  
**fatty acid ester(s)**, 0.3-1.0 weight% of  
**emulsion** stabiliser, 1.9-4.8 weight% of sucrose **fatty**  
**acid ester**, and 3.8-9.8 weight% of ethyl alcohol with 5-40  
wt.pts. of natural tocopherol. **Emulsion** pref. also contains  
9.5-11.8 weight% of plant fat and oil and more pref. 29-55 weight pts. of D-  
**sorbitol** and starch-decomposed sugar prod(s). and 22-40 pts. of  
sterilised pure water.

USE/ADVANTAGE - **Emulsion** is small as 3 microns or smaller  
in size of dispersed particles, allowing dispersion in water, alcohols,  
acids, alkalis, salts and hot water. It has good **emulsion**  
stability and high oxidation resistance.

0/0

FS CPI

FA AB

MC CPI: D03-C; D10-A

L100 ANSWER 14 OF 16 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 1988-199316 [29] WPIX

DNC C1988-088936

TI Powdery compound **emulsifier** - formed from crystalline  
alpha-maltose and at least 2 of sucrose-, glycerine-and **sorbitan**  
**-fatty acid ester(s)**.

DC B07 D13 D21 E13 E17

IN OKUMURA, M

PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU; (MITS-N) MITSUWA FOODS KK

CYC 6

PI EP 274812 A 19880720 (198829)\* EN 8

AU 8775211 A 19880630 (198834)  
JP 63171629 A 19880715 (198834)  
US 4857358 A 19890815 (198941) 5  
CA 1295248 C 19920204 (199212)  
EP 274812 B1 19930203 (199305) EN 11 B01F017-00  
DE 3784046 G 19930318 (199312) B01F017-00  
JP 05073454 B 19931014 (199344) 6 B01F017-38  
KR 9411564 B1 19941221 (199643) B01F017-38  
ADT EP 274812 A EP 1987-306141 19870710; JP 63171629 A JP 1986-313324  
19861229; US 4857358 A US 1987-70139 19870629; EP 274812 B1 EP 1987-306141  
19870710; DE 3784046 G DE 1987-3784046 19870710, EP 1987-306141 19870710;  
JP 05073454 B JP 1986-313324 19861229; KR 9411564 B1 KR 1987-7418 19870710  
FDT DE 3784046 G Based on EP 274812; JP 05073454 B Based on JP 63171629  
PRAI JP 1986-313324 19861229  
REP A3...9005; EP 178665; FR 2353234; FR 2566409; JP 61035800; No-SR.Pub; US  
2929723; US 3764346; US 3889008  
IC ICM B01F017-38  
ICS A21D002-16; A21D002-18; A21D010-00; A23G003-00; **A23L001-03;**  
**A23L001-035;** A61K007-00; A61K009-10; A61K047-14; B01F017-56  
AB EP 274812 A UPAB: 19930923  
A powdery compound emulsifier is obtd. by (a) adding crystalline  
alpha-maltose (AM) to a liquid or paste cpd. emulsifier containing 2 or more  
members selected from sucrose **fatty acid ester**  
, glycerine **fatty acid ester** and  
**sorbitan fatty acid ester** and (b)  
converting the crystalline AM into crystalline beta-maltose hydrate (BMH)  
to effect pulverisation.  
The liquid or paste cpd. emulsifier pref. contains water and either of  
ethyl alcohol, maltose, oil and fat. The amount of crystalline AM is pref.  
0.5-15 fold by weight of that of the liquid or paste cpd. emulsifier.  
USE/ADVANTAGE - The powdery cpd. emulsifier has sufficient  
emulsifying and foaming powers and excellent storage stability. The cpd.  
emulsifier is in stable and nonhygroscopic form and can be used in food  
prods., cosmetics and pharmaceuticals. In food prods., the emulsifier  
improves the emulsifying and foaming powders of oil and fat, the  
mechanical processability of food materials, such as starch and wheat  
flour and the quality and shelf life of the final prods. In cosmetics, the  
emulsifier improves the emulsifying and cleansing powers, the  
dispersibility of oil-soluble substances in water and the affinity of the  
cosmetic ingredients to the skin, as well as imparting appropriate gloss  
and texture. In pharmaceuticals, the emulsifier improves the affinity and  
absorption of the effective ingredients to or by cells and tissues, as  
well as improving the mechanical processability.  
0/0  
FS CPI  
FA AB; DCN  
MC CPI: B04-C03C; B07-A02; B10-E04C; B12-J01; B12-L02; B12-M03; D03-H01N;  
D08-B; E07-A02D; E07-A02H; E10-E04G  
  
L100 ANSWER 15 OF 16 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
AN 1987-145178 [21] WPIX  
DNC C1987-060477  
TI Storage stable cake premix for microwave cooking - containing flour of low  
moisture content, sugar, baking powder and **emulsifier**.  
DC D11  
IN KUBO, T; KUNIMOTO, Y; YAMAMOTO, M  
PA (HOUF) HOUSE FOOD IND CO LTD  
CYC 5

PI GB 2182835 A 19870528 (198721)\*  
AU 8664271 A 19870430 (198723)  
JP 62096032 A 19870502 (198723)  
JP 62096033 A 19870502 (198723)  
JP 62096034 A 19870502 (198723)  
JP 62096035 A 19870502 (198723)  
GB 2182835 B 19900221 (199008)  
KR 8903911 B 19891012 (199040)  
US 5084288 A 19920128 (199207)  
ADT GB 2182835 A GB 1986-25167 19861021; JP 62096032 A JP 1985-236077  
19851022; JP 62096033 A JP 1985-236078 19851022; JP 62096034 A JP  
1985-236079 19851022; JP 62096035 A JP 1985-236085 19851022; US 5084288 A  
US 1989-318500 19890303

PRAI JP 1985-236077 19851022; JP 1985-236078 19851022;  
JP 1985-236079 19851022; JP 1985-236080 19851022

IC A21D010-00; A23G003-00; **A23L001-02**

AB GB 2182835 A UPAB: 19930922

Premix for microwave cooking comprises flour of moisture content 1-9.5  
(3-7.5) weight%, sugar; baking powder and emulsifier. The compsn. may also  
include at least one of **sorbitol**, powdered albumen, powdered  
milk, edible fats, oils and salt.

More specifically the baking powder is 1-4.5 weight%; the emulsifier  
0.3-3 weight% and the opt. **sorbitol** 7-30 weight%. The baking powder  
(especially 1.5-4 weight%) is NaHCO<sub>3</sub> plus tartaric acid, H<sub>3</sub>PO<sub>4</sub> or  
glucono-delta-lactone. The emulsifier (especially 0.8-1.2 weight%) is at least

one

of sugar **ester**, **sorbitan fatty acid**  
**ester** and **glyceride**.

The premix is placed in a package (paper, plastic or a composite) at  
0.15-0.32 g/ml of package volume and with ratio package height (cm):bottom  
area (sq.cm) 0.02-0.35 (0.08-0.35):1. The compsn. may contain solid pieces  
(dried fruit, vegetable flakes and sliced nuts) of maximum particle size not  
over 4000 (1400-3500) microns of specific weight not over 1.1(1.05).

USE/ADVANTAGE - This premix has good storage properties, ie reduced  
deterioration of oil, colour and taste, without caking or gas generation.  
Cakes prepared from the premix have good moisture retention; are soft,  
spongy and elastic; have a fine texture and rise well.

0/0

FS CPI

FA AB

MC CPI: D01-B02B

L100 ANSWER 16 OF 16 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 1985-272337 [44] WPIX

DNC C1985-117963

TI Water-oil-water **emulsion** mfr. - using **ester** made from  
unsatd. **fatty acid** and glycerine as **emulsifier**  
for water-oil type **emulsion**.

DC D13

PA (MEIP) MEIJI MILK PROD CO LTD

CYC 2

PI JP 60183031 A 19850918 (198544)\* 4  
US 4714566 A 19871222 (198801)  
JP 03038887 B 19910612 (199127)

ADT JP 60183031 A JP 1984-38667 19840302; US 4714566 A US 1984-610465  
19840803; JP 03038887 B JP 1984-38667 19840302

PRAI JP 1984-38667 19840302

IC A23C011-00; A23C013-12; A23G009-02; **A23L001-19**; A61K007-00;

B01F017-34; B01J013-00

AB JP 60183031 A UPAB: 19930925

When manufacturing W/O/W type cpd. **emulsion**, an **ester** made from unsatd. **fatty acid** and glycerine is used as an emulsifier for preparing W/O type **emulsion**.

Specifically the W/O/W type cpd. **emulsion** is mfd. by converting O/W type **emulsion** to W/O type **emulsion** by agitation. Then the obt'd. W/O type **emulsion** is added to aqueous phase to produce the W/O/W type **emulsion**. The **glyceride** of unsatd. fatty acid is one or more of monoelcin, dielcin, monolinolein, dilinolein. The emulsifier opt. contains, a small quantity of lecithin and/or fatty acid diglyceride.

USE/ADVANTAGE - Usually, the W/O/W type cpd. **emulsion** is prepared by using a Span series emulsifier such as **sorbitan** mono-oleate in an amount of 20% or more, to oil, at the prim. emulsifying stage. Therefore, these prods. could not be used for foods because of the high content of emulsifier. A stabilised W/O/W type **emulsion** having very fine water particles, can be prepared. Based on this effect, a thick mayonnaise, dressing, ice cream etc. can be made.

O/1

FS CPI

FA AB

MC CPI: D03-E08; D03-H01H; D03-H01N; D08-B

=> d 1101 1-11 ti

L101 ANSWER 1 OF 11 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

TI Food product, e.g. salad dressings, coffee whiteners, nutritional drinks or beverages, sauces, gravies, marinades, rubs, nutritional bars, baked goods, caramel, confections, and yogurt, comprises di-acyl **glycerol** oil.

L101 ANSWER 2 OF 11 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

TI Uniformly coloring dragees used in pharmaceutical or confectionery applications, by spray coating with aqueous dispersion containing polymer, plasticizer and dye.

L101 ANSWER 3 OF 11 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

TI Stable salad dressings which contain a cholesterol lowering amount of a sterol or stanol ester and which are stable at room temperatures and when refrigerated.

L101 ANSWER 4 OF 11 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

TI Flavored nut spread with desired sweetness.

L101 ANSWER 5 OF 11 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

TI Granular lipid compsn. for food, feed and drug industries - consists of lipid, surfactant and porous granular sugar.

L101 ANSWER 6 OF 11 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

TI Fat substitute compsn. having reduced laxative effect - comprises fat substitute material in combination with digestible fatty acid polyester anti-laxative effect.

L101 ANSWER 7 OF 11 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

TI Whippable, non-dairy cream based on liquid oil - has good whipping time, overrun, viscosity and firmness and healthier than known non-dairy creams.



L101 ANSWER 8 OF 11 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
TI Seamless capsules containing hydrophilic substances - have lower **fatty acid ester(s)** of sucrose between contents and covering films.

L101 ANSWER 9 OF 11 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
TI Preparation of blends of meals or flours for fodder mfr. - using surfactant and anti-dust additive.

L101 ANSWER 10 OF 11 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
TI Porous expanded cereal powder compsn. production - by irradiating briefly with IR radiation at an elevated temperature and for a few minutes at a lower temperature.

L101 ANSWER 11 OF 11 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
TI Heating protein to give porous expanded prod. - using infrared rays in presence of surfactants, **polyols** and foaming agents.

=> d 1101 1-8 all

L101 ANSWER 1 OF 11 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
AN 2003-877592 [81] WPIX  
DNC C2003-247966  
TI Food product, e.g. salad dressings, coffee whiteners, nutritional drinks or beverages, sauces, gravies, marinades, rubs, nutritional bars, baked goods, caramel, confections, and yogurt, comprises di-acyl **glycerol** oil.  
DC D13  
IN BOICE, B; EGBERT, R; SIKORSKI, D M; STUCHELL, Y M; WIDLAK, N  
PA (ARCH) ARCHER-DANIELS MIDLAND CO; (BOIC-I) BOICE B; (EGBE-I) EGBERT R; (SIKO-I) SIKORSKI D M; (STUC-I) STUCHELL Y M; (WIDL-I) WIDLAK N  
CYC 103  
PI WO 2003094634 A1 20031120 (200381)\* EN 88 A23L001-24 <--  
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS  
LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW  
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK  
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL  
PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA  
ZM ZW  
US 2004009284 A1 20040115 (200406) A23D007-00  
AU 2003228860 A1 20031111 (200442) A23L001-24 <--  
ADT WO 2003094634 A1 WO 2003-US13978 20030505; US 2004009284 A1 Provisional US  
2002-380121P 20020506, Provisional US 2003-453722P 20030502, US  
2003-429260 20030505; AU 2003228860 A1 AU 2003-228860 20030505  
FDT AU 2003228860 A1 Based on WO 2003094634  
PRAI US 2003-453722P 20030502; US 2002-380121P 20020506;  
US 2003-429260 20030505  
IC ICM A23D007-00; **A23L001-24**  
ICS A23D009-00; **A23L001-30; A23L001-307;**  
**A23L001-39**  
AB WO2003094634 A UPAB: 20031216  
NOVELTY - A food product comprises di-acyl **glycerol** (DAG) oil  
used in place of at least some triacylglycerol (TAG) oil/fat.  
USE - As food product, e.g. salad dressings, i.e. spoonable salad  
dressing without enzyme-modified egg yolks or pourable salad dressing;

coffee whiteners; nutritional drinks or beverages, i.e. soy-based milk; sauces; gravies; marinades; rubs; nutritional bars; baked goods; caramel, i.e. protein-fortified; confections; and yogurt (claimed).

ADVANTAGE - The invention provides unique health and nutritional advantages to TAG oils. It provides health, nutritional, and even organoleptic properties.

DESCRIPTION OF DRAWING(S) - The figure shows a investigation of functional properties of DAG vs. TAG high hydrophilic-lipophilic balance (HLB) emulsifiers.

Dwg.1A/14

FS

FA AB; GI

MC CPI: D03-B14; D03-H01H

L101 ANSWER 2 OF 11 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 2003-803787 [75] WPIX

DNC C2003-221798

TI Uniformly coloring dragees used in pharmaceutical or confectionery applications, by spray coating with aqueous dispersion containing polymer, plasticizer and dye.

DC A96 B05 D13

IN MALANDAIN, M; MOUTIER, E

PA (SEPP) SEPPIC SOC EXPL PROD IND CHIM

CYC 27

PI WO 2003071882 A1 20030904 (200375)\* FR 20 A23L001-275 <--

RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GR HU IE IT LU MC NL PT  
SE SI SK TR

W: PL

FR 2836333

A1 20030829 (200375)

A23G003-28

ADT WO 2003071882 A1 WO 2003-FR349 20030205; FR 2836333 A1 FR 2002-2342  
20020225

PRAI FR 2002-2342 20020225

IC ICM A23G003-28; **A23L001-275**

ICS A23G003-00; A23G003-26; A23G003-30; A23P001-08; A61K009-30

AB WO2003071882 A UPAB: 20031120

NOVELTY - Coloring dragees involves at least one step of spraying with a colored aqueous dispersion (A) containing at least one film-forming polymer (I), a plasticizer (II) and a dye (III).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) a composition (A') for coloring dragees, which comprises 40-93 weight% water, 4-15 weight% polymer (I') for food or pharmaceutical use, 3-15 weight% sparingly water soluble plasticizer (II') having a hydrocarbon chain of at least 12C, 0.1-15 weight% dyes (III) and optionally upto 15 weight% fillers, additives, sweeteners and/or aromas for food or pharmaceutical use, and

(2) a solid composition (A'') for coloring dragees, which comprises 25-75 weight % (I'), 5-25 weight % (II') and optionally upto 70 weight % fillers, additives, sweeteners and/or aromas for food or pharmaceutical use.

USE - Used for coloring dragees used in the pharmaceutical or food (specifically confectionery) industry, typically comprising an almond, dried fruit, piece of chocolate or drug-containing mini-tablet enclosed in a thick, sugar-based protective coating.

ADVANTAGE - A uniform, aesthetically acceptable coloration is obtained (even on dragees based on non-cariogenic sugars, which are difficult to coat conventionally), by film coating using a dilute aqueous dispersion.

Dwg.0/0

FS CPI  
FA AB; DCN  
MC CPI: A07-B04; A08-E01; A08-P01; A12-V01; A12-W09; B04-C02A; B04-C02D;  
B04-C03B; B04-C03D; B12-M11B; D03-E02; D03-H01E

L101 ANSWER 3 OF 11 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 2000-239189 [21] WPIX

DNC C2000-072926

TI Stable salad dressings which contain a cholesterol lowering amount of a sterol or stanol ester and which are stable at room temperatures and when refrigerated.

DC A97 D13 E13 E17

IN BRUCE, R D; BURRUANO, B T; DARTEY, C K; HIGGINS, J D

PA (MCNI) MCNEIL-PPC INC; (JOHJ) JOHNSON & JOHNSON

CYC 33

PI EP 986962 A1 20000322 (200021)\* EN 11 A23L001-24 <--  
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
RO SE SI

NO 9904195 A 20000301 (200022) A23L001-24 <--

AU 9944636 A 20000316 (200024) A23L001-035 <--

JP 2000102361 A 20000411 (200029) 8 A23L001-24 <--

CA 2281128 A1 20000229 (200033) EN A23L001-24 <--

BR 9903979 A 20000905 (200048) A23L001-30 <--

US 6123978 A 20000926 (200051) A23D009-007

MX 9908019 A1 20000901 (200139) A23L001-24 <--

US 6399137 B1 20020604 (200242) A23D009-007

NZ 337359 A 20030530 (200341) A23L001-24 <--

NO 316204 B1 20031219 (200404) A23L001-24 <--

MX 214894 B 20030623 (200419) A23D009-007

ADT EP 986962 A1 EP 1999-306841 19990827; NO 9904195 A NO 1999-4195 19990830;

AU 9944636 A AU 1999-44636 19990820; JP 2000102361 A JP 1999-243164

19990830; CA 2281128 A1 CA 1999-2281128 19990830; BR 9903979 A BR

1999-3979 19990830; US 6123978 A US 1998-143817 19980831; MX 9908019 A1 MX

1999-8019 19990830; US 6399137 B1 Cont of US 1998-143817 19980831, US

2000-625667 20000726; NZ 337359 A NZ 1999-337359 19990819; NO 316204 B1 NO

1999-4195 19990830; MX 214894 B MX 1999-8019 19990830

FDT US 6399137 B1 Cont of US 6123978; NO 316204 B1 Previous Publ. NO 9904195

PRAI US 1998-143817 19980831; US 2000-625667 20000726

IC ICM A23D009-007; A23L001-035; A23L001-24;

A23L001-30

ICS A23D007-01; A23L001-03; A23L001-29

AB EP 986962 A UPAB: 20000502

NOVELTY - Stable foodstuffs which contain:

(1) a cholesterol lowering amount of a sterol or stanol ester,

(2) an emulsifier or a hydrocolloid;

(3) a crystal fat inhibitor.

The foodstuffs, including salad dressings are stable even when refrigerated.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is made for a method of preparing the stable food emulsion comprising:

(1) providing an aqueous system;

(2) providing a food grade acceptable oil;

(3) providing a stanol ester;

(4) providing a crystal fat inhibitor and an emulsifier;

(5) admixing these ingredients;

(6) heating the mixture to 100 - 150 deg. F to form a heated oil; and

(7) adding the heated oil to the aqueous system.

USE - As a stable foodstuff which lowers cholesterol levels. An

actual claimed EMBODIMENT is as a salad dressing.

ADVANTAGE - The foodstuff remains stable at different temperatures. It is stable both at room temperature and when refrigerated. This is useful for foodstuffs such as salad dressings that are sold at room temperature but which are refrigerated once opened.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: A12-W09; D03-H01H; D03-H01N; D03-H01Q; D03-H01T2; E01; E07-A02A; E07-A02D; E10-E04G; E10-E04K

L101 ANSWER 4 OF 11 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 1999-228504 [19] WPIX

CR 2003-851280 [79]

DNC C1999-067160

TI Flavored nut spread with desired sweetness.

DC A28 A97 D13

IN SACKENHEIM, R J; WONG, V Y

PA (PROC) PROCTER & GAMBLE CO

CYC 83

PI US 5885646 A 19990323 (199919)\* 9 A23L001-38 <--

WO 9921440 A1 19990506 (199925) EN

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL  
OA PT SD SE SZ UG ZW

W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE  
GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG  
MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG  
UZ VN YU ZW

AU 9898092 A 19990517 (199939)

EP 1026964 A1 20000816 (200040) EN A23L001-38 <--

R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU NL PT SE

BR 9813883 A 20000926 (200051) A23L001-38 <--

CN 1278147 A 20001227 (200123) A23L001-38 <--

MX 2000004092 A1 20010101 (200166) A23L001-38 <--

JP 2001520872 W 20011106 (200203) 34 A23L001-38 <--

ADT US 5885646 A US 1997-958349 19971027; WO 9921440 A1 WO 1998-US22059

19981019; AU 9898092 A AU 1998-98092 19981019; EP 1026964 A1 EP

1998-952374 19981019, WO 1998-US22059 19981019; BR 9813883 A BR 1998-13883

19981019, WO 1998-US22059 19981019; CN 1278147 A CN 1998-810658 19981019;

MX 2000004092 A1 MX 2000-4092 20000427; JP 2001520872 W WO 1998-US22059

19981019, JP 2000-517614 19981019

FDT AU 9898092 A Based on WO 9921440; EP 1026964 A1 Based on WO 9921440; BR

9813883 A Based on WO 9921440; JP 2001520872 W Based on WO 9921440

PRAI US 1997-958349 19971027

IC ICM A23L001-38

AB US 5885646 A UPAB: 20031208

NOVELTY - A flavored nut spread has a spreadability value of 500-1400 gram force and comprises a flavorant, 20-55 (preferably 25-40)% of nut solids, 30-60 (preferably 35-50)% of total fat and 15-50 (preferably 20-35)% of sugar.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a process for preparing a nut spread as above which comprises forming a homogeneous blend of:

(a) a fluid suspension which consists of:

(i) an intimate mixture of sugar and an edible liquid oil in a sugar:oil ratio of 0.7:1 or more; and

(ii) edible surfactant capable of imparting increased fluidity to the mixture;

(b) a nut solids-containing mixture which comprises:

- (i) 20-55 (preferably 30-45)% nut solids;
- (ii) 30-60 (preferably 40-55)% fat; and
- (iii) optionally (preferably 5-10%) sugar.

The ratio of (a) to (b) is such that the resulting spread has a sugar level of 15-50%.

USE - Used as a spread with desired sweetness.

ADVANTAGE - The spread is easily spreadable, has a high level of sugar, does not require high shear equipment to make and has the flexibility to provide different flavored products.

Dwg.0/0

FS CPI

FA AB

MC CPI: A10-E08A; A12-W09; A12-W12C; D03-C02

L101 ANSWER 5 OF 11 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 1993-131473 [16] WPIX

DNC C1993-058712

TI Granular lipid compsn. for food, feed and drug industries - consists of lipid, surfactant and porous granular sugar.

DC B05 B07 D13 E19

PA (NISS-N) NISSEI BADEISHIE KK

CYC 1

PI JP 05070793 A 19930323 (199316)\* 5 C11B015-00

ADT JP 05070793 A JP 1991-257244 19910910

PRAI JP 1991-257244 19910910

IC ICM C11B015-00

ICS A23D009-00; **A23L001-035**; A61K009-14; B01J002-00

AB JP 05070793 A UPAB: 19930924

Compsn. consists of up to 22 weight% lipid, 3-25 weight% surfactant and 75-79 weight% porous granular sugar. Another new granular compsn. consists of less than 18 weight% lipid, 3-21 weight% surfactant, 75-79 weight% porous granular sugar

and diluent, with a combined ratio of lipid plus surfactants of less than 21 weight% and a combined ratio of lipid, surfactants and diluents of 21-25 weight%.

Lipids include **fatty acid glycerides**, **fatty acid esters** with higher alcohols, vitamin A and its **fatty acid esters**, Vitamin E and its **fatty acid esters**, phospholipids, glycolipids and lipid precursors, such as fatty acids, higher alcohols, steroids and terpenoids. Available porous granular sugars include sucrose, glucose, fructose, oligosaccharides and hydrolysed starch. The surfactant is typically a **glycerol fatty acid ester** and/or a **sorbitan fatty acid ester**.

USE/ADVANTAGE - The compsn. is stabilised to oxygen, heat and light and has high fluidity. It gives a stable aqueous dispersion or solution of the granular compsn. available in food, feed and drug industries.

0/0

FS CPI

FA AB; DCN

MC CPI: B03-A; B03-H; B04-B01B; B04-B02B1; B04-C02B; B05-B01P; B07-A02; B10-A07; B10-C04E; B10-E04C; B10-E04D; B12-J01; B12-M11D; D03-G; D03-H; E01; E05-G09D; E06-A01; E07-A02A; E07-A02D; E07-A02H; E10-A07; E10-E04G; E10-E04K; E10-E04M1; E10-G02G

L101 ANSWER 6 OF 11 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 1992-365895 [44] WPIX  
CR 1994-263240 [32]; 1995-005785 [01]; 1995-254409 [33]  
DNC C1992-162413  
TI Fat substitute compsn. having reduced laxative effect - comprises fat substitute material in combination with digestible fatty acid polyester anti-laxative effect.  
DC D13  
IN CAMPBELL, M L; MEYER, R S  
PA (CURT-N) CURTICEBURNS INC; (CURT-N) CURTICE BURNS INC  
CYC 37  
PI WO 9217077 A2 19921015 (199244)\* EN 24 A23L001-308 <--  
RW: AT BE CH DE DK ES FR GB GR IT LU MC NL OA SE  
W: AT AU BB BG BR CA CH CS DE DK ES FI GB HU JP KP KR LK LU MG MN MW  
NL NO PL RO RU SD SE US  
AU 9216767 A 19921102 (199305) A23L001-308 <--  
EP 577726 A1 19940112 (199402) EN  
R: AT BE CH DE DK ES FR GB GR IT LI LU MC NL SE  
US 5294451 A 19940315 (199411) 11 A23D009-00  
JP 06506113 W 19940714 (199432) 10 A23L001-307 <--  
WO 9217077 A3 19930708 (199513) A23L001-308 <--  
ADT WO 9217077 A2 WO 1992-US2463 19920326; AU 9216767 A AU 1992-16767 19920326, WO 1992-US2463 19920326; EP 577726 A1 EP 1992-909374 19920326, WO 1992-US2463 19920326; US 5294451 A CIP of US 1991-677553 19910329, US 1992-857063 19920324; JP 06506113 W JP 1992-508928 19920326, WO 1992-US2463 19920326; WO 9217077 A3 WO 1992-US2463 19920326  
FDT AU 9216767 A Based on WO 9217077; EP 577726 A1 Based on WO 9217077; JP 06506113 W Based on WO 9217077  
PRAI US 1992-857063 19920324; US 1991-677553 19910329  
REP No-SR.Pub; EP 311154; EP 352907; EP 368534; EP 375031; EP 69412; EP 86527; US 3600186; US 4005195; US 4005196  
IC ICM A23D009-00; **A23L001-307; A23L001-308**  
ICS A61K031-23; A61K031-70; A61K037-22  
AB WO 9217077 A UPAB: 19950904  
Compsn. comprises an edible non-digestible fat substitute material having a m.pt. of 37 deg.C or less, in combination with anti-laxative agent (I) which is a digestible **polyol** fatty acid polyester having at most 3 **fatty acid ester** gps. The **polyol** is a sugar or sugar alcohol containing 4-8 hydroxyl gps. with each fatty acid containing 8-18C atoms. The agent is contained in the compsn. in sufficient amts. to reduce leakage of the fat substitute through the anal sphincter.  
Also claimed is a fat substitute containing an emulsifier as (I). (I) (opt. ethoxylated or acrylated) mono- or di-**glyceride**, polyglyceryl ester, xanthan gum, microcrystalline cellulose etc.  
USE/ADVANTAGE - The fat substitute compsn. overcomes the laxative side effects associated with fat substitute materials of prior art. The food compsns. provide the benefits of low caloric content while causing reduced or no laxative side effects in mammals, after ingestion of the fat compsns.  
0/0  
Dwg.0/0  
FS CPI  
FA AB  
MC CPI: D03-C; D03-H01T  
  
L101 ANSWER 7 OF 11 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN  
AN 1992-351237 [43] WPIX  
DNC C1992-155864  
TI Whippable, non-dairy cream based on liquid oil - has good whipping time,

overrun, viscosity and firmness and healthier than known non-dairy creams.  
 DC A97 D13  
 IN CAMPBELL, I J; LIPS, A; MORLEY, W G  
 PA (UNIL) UNILEVER PLC; (UNIL) UNILEVER NV; (UNIL) UNILEVER LTD; (UNIL)  
 UNILEVER PATENT HOLDINGS BV

CYC 20

PI EP 509579 A1 19921021 (199243)\* EN 7 A23L001-19 <--

R: AT BE CH DE DK ES FR GB GR IT LI NL PT SE

AU 9214884 A 19921022 (199250) A23D007-02

CA 2066345 A 19921018 (199302) A23L001-19 <--

FI 9201638 A 19921018 (199304) A23L001-19 <--

JP 05146267 A 19930615 (199328) 5 A23L001-19 <--

ZA 9202768 A 19931229 (199405) 13 A23L000-00

US 5290581 A 19940301 (199409) 4 A23D007-00

EP 509579 B1 19941228 (199505) EN 7 A23L001-19 <--

R: AT BE CH DE DK ES FR GB GR IT LI NL PT SE

DE 69200997 E 19950209 (199511) A23L001-19 <--

AU 662518 B 19950907 (199544) A23D007-02

FI 107509 B1 20010831 (200157) A23L001-19 <--

CA 2066345 C 20031209 (200404) EN A23L001-19 <--

ADT EP 509579 A1 EP 1992-200969 19920406; AU 9214884 A AU 1992-14884 19920414;  
 CA 2066345 A CA 1992-2066345 19920416; FI 9201638 A FI 1992-1638 19920413;  
 JP 05146267 A JP 1992-119626 19920413; ZA 9202768 A ZA 1992-2768 19920415;  
 US 5290581 A US 1992-869939 19920417; EP 509579 B1 EP 1992-200969  
 19920406; DE 69200997 E DE 1992-600997 19920406, EP 1992-200969 19920406;  
 AU 662518 B AU 1992-14884 19920414; FI 107509 B1 FI 1992-1638 19920413; CA  
 2066345 C CA 1992-2066345 19920416

FDT DE 69200997 E Based on EP 509579; AU 662518 B Previous Publ. AU 9214884;  
 FI 107509 B1 Previous Publ. FI 9201638

PRAI EP 1991-303439 19910417

REP 1.Jnl.Ref; EP 191545; FR 2248791; GB 1458568; JP 55124442; US 3628968; US  
 3702768; US 3935324; US 3944680; 01Jnl.Ref

IC ICM A23D007-02; **A23L001-19**

ICS A23D007-04

AB EP 509579 A UPAB: 19931115

Whippable non-dairy cream (I) comprises an emulsion of a water-continuous phase (II) and a fat phase (III). (I) contains 15-60 weight% globular vegetable fat of which at least 85 weight% is liquid oil and the rest hard fat. It contains 0.005-3.0 weight% food acceptable salt of a 2-4 valent or alkaline earth metal ions. It is whippable within 6 mins. with a domestic electric whipper. (II) opt. contains protein(s) and/or thickener(s). (III) is fat and opt. an emulsifier system.

(I) is whippable within 4 minutes. It contains 25-50 weight% fat. At least 95 weight% of the fat is a liquid oil. The salt is of Mg, Ca, Al, Mn or Fe, especially CaCl<sub>2</sub>, MgCl<sub>2</sub>, MnCl<sub>2</sub>, FeCl<sub>2</sub> or FeCl<sub>3</sub>. The hard fat is (hardened) palm kernel, (hardened) coconut, hardened rapeseed oil, hardened palm oil, hardened soybean oil and/or butterfat. It is especially a 25:75-75:25 mixture

of

pK 38 and CN. The thickener is guar gum, locust bean gum, carageenan, xanthan gum, alginate, and/or cellulose ether and is at 0.05-2.0 weight%. The protein is a caseinate. (I) contains less than 10 weight% butterfat. The emulsifier is a monoglyceride acetate (Lactodan), lecithin, **polyglycerol ester**, mono- or di-glyceride diacetyl tartarate, polyoxyethylene sorbitan ester and/or monoglyceride, especially Triodan, lecithin or Hymon derived from unsatd. fatty acid or fats.

ADVANTAGE - (I) are rich in polyunsaturated fatty acids (PUFA) making them healthier than known non-dairy creams. They have good whipping time,

overrun, viscosity and firmnes  
Dwg.0/0

FS CPI

FA AB

MC CPI: A12-W09; D03-B11

L101 ANSWER 8 OF 11 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

AN 1991-112527 [16] WPIX

DNC C1991-048214

TI Seamless capsules containing hydrophilic substances - have lower **fatty acid ester(s)** of sucrose between contents and covering films.

DC B07 D13 D21 J04

IN KAMAGUCHI, R; SUZUKI, T

PA (MORI-N) MORISHITA JINTAN KK

CYC 2

PI JP 03052639 A 19910306 (199116)\* 4

US 5362564 A 19941108 (199444)# 4 B32B005-16

JP 2806564 B2 19980930 (199844) 4 B01J013-14

ADT JP 03052639 A JP 1989-188047 19890720; US 5362564 A US 1992-846949  
19920306; JP 2806564 B2 JP 1989-188047 19890720

FDT JP 2806564 B2 Previous Publ. JP 03052639

PRAI JP 1989-188047 19890720

IC **A23L001-00**; A23P001-04; B01J013-02

ICM B01J013-14; B32B005-16

ICS **A23L001-00**; A23P001-04; A61K009-50; B01J013-02; B32B009-02

AB JP 03052639 A UPAB: 19930928

Seamless capsules containing hydrophilic substances and consist of the contents and films covering them are characterised by that the contents are hydrophilic substances and that lower **fatty acid esters** of sucrose are included between the contents and the films.

Seamless capsules containing water were prepared using triple concentric nozzles. Water, a sucrose acetate isobutylate (SAIB) solution as a lower **fatty acid ester** of sucrose heated at 80 deg.C and a mixture consisting of 20 weight% gelatin, 5 weight% D-sorbitol and 75 weight% water heated at 60 deg.C were jetted simultaneously from the inner, medium and outer nozzles of the triple concentric nozzles respectively into a vegetable oil kept at 12 deg.C flowing down at a rate of 0.18 m/s to form seamless capsules.

USE/ADVANTAGE - The contents of the seamless capsules obtained can be drug aqueous solns., foods, cosmetics, perfumes and industrial chemicals. Seamless capsules containing hydrophilic substances, partic. aqueous solns.,

can

be produced easily. Since the lower **fatty acid esters** of sucrose protecting the hydrophilic substances are colourless, the colour design of the seamless capsules can be made easily.  
0/0

FS CPI

FA AB; DCN

MC CPI: B07-A02; B10-A07; B12-J01; B12-L02; B12-L07; B12-M11C; D03-H02F;  
D08-B; J04-A06

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L135 ANSWER 1 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

TI Efficient **esterification** of **sorbitan** oleate by lipase in a solvent-free system.

L135 ANSWER 2 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

TI Simultaneous analysis of four kinds of **emulsifiers** in beverages by GC/MS.

L135 ANSWER 3 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

TI Solubilization patterns of lutein and lutein esters in food grade nonionic microemulsions.

L135 ANSWER 4 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

TI Investigating the molecular heterogeneity of polysorbate **emulsifiers** by MALDI-TOF MS.

L135 ANSWER 5 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

TI **Emulsifiers**.

L135 ANSWER 6 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

TI [Hydrophilic homogeneous monoglyceride **formulations** and process for their manufacture.]

L135 ANSWER 7 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

TI Enzymatic synthesis of **sorbitan** esters using a low-boiling-point azeotrope as a reaction solvent.

L135 ANSWER 8 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

TI Interesterification of triglyceride and **fatty acid** in a microaqueous reaction system using lipase-surfactant complex.

L135 ANSWER 9 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

TI [Finely-comminuted liver sausage. II. Action and optimization of **emulsifiers**.]  
Feinzerkleinerte Leberwurst. II. Wirkungsweise und Optimierung von **Emulgatoren**.

L135 ANSWER 10 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

TI Process for preparation of triglyceride and triglyceride **composition**.

L135 ANSWER 11 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

TI Chemical interesterification of olive-tristearin **blends** for margarines.

L135 ANSWER 12 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

TI Analysis of **polyglycerols** and other **polyols** from **emulsifiers** by HPLC.

L135 ANSWER 13 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

TI [Method for preparing a fat **composition**.]

L135 ANSWER 14 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

TI [Method for preparing a basic powder **mixture** for ice cream

manufacture.]

- L135 ANSWER 15 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
TI Pourable fatty **dispersions**.
- L135 ANSWER 16 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
TI Solubilization patterns of lutein and lutein esters in food grade non-ionic microemulsions.
- L135 ANSWER 17 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
TI Pourable fatty **dispersions**.
- L135 ANSWER 18 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
TI Synthesis and commercial preparations of surfactants for the food industry.
- L135 ANSWER 19 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
TI Lecithin and co. - diverse and indispensable.
- L135 ANSWER 20 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
TI Process for the selective preparation of derivatives of monosaccharides and **polyols** which are partially acylated.
- L135 ANSWER 21 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
TI Lipid chemistry - fat substitutes.
- L135 ANSWER 22 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
TI Sisterna reveals all about its sucro-esters.
- L135 ANSWER 23 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
TI Process for preparing nonionic surfactant **sorbitan fatty acid** esters with and without previous **sorbitan** cyclization.
- L135 ANSWER 24 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
TI Oil-in-water type **emulsified** fat and oil composition.
- L135 ANSWER 25 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
TI The fractionation of **glyceride mixtures** by extraction.
- L135 ANSWER 26 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
TI Finely comminuted liver sausage. Mode of action and optimization of **emulsifiers**, part 2.
- L135 ANSWER 27 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
TI Processing of fats and oils.
- L135 ANSWER 28 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
TI **Emulsifiers**.

=> => d l135 1 all

- L135 ANSWER 1 OF 28 FSTA COPYRIGHT 2004 IFIS on STN  
AN 2004:BQ187 FSTA  
TI Efficient **esterification** of **sorbitan** oleate by lipase in a solvent-free system.

AU Yan Xu; Dong Wang; Xiao Qing Mu; Yong Quan Ni  
CS Key Lab. of Ind. Biotech. of Min. of Education, Sch. of Biotech., S.  
Yangtze Univ., Wuxi 214036, China. E-mail yxu(a)sytu.edu.cn  
SO Journal of the American Oil Chemists' Society, (2003), 80 (7) 647-651, 19  
ref.  
ISSN: 0003-021X  
DT Journal  
LA English  
AB **Esterification of sorbitan with oleic acid**  
catalysed by lipase in a solvent-free system to form **sorbitan**  
oleate (commercial name Span80) was studied as a feasible approach aimed  
at meeting the demand for sugar alcohol-based surfactants. Results  
obtained from enzymic synthesis of **sorbitan** oleate indicated  
that Novozym 435 (immobilized lipase from *Candida antarctica*) had highest  
catalytic activity in a solvent-free system. Introduction of a  
reduced-pressure system increased production of **sorbitan** oleate  
to a maximum of 95% of theoretical yield, obtained from 0.2 mol  
**sorbitan**, 0.1 mol **oleic acid** and 2.0 g lipase (6 weight% of  
**sorbitan**) in a solvent-free reaction mixture under optimal  
reaction conditions. Results obtained from lipase-catalysed batch  
**esterification** reactions showed that >90% conversion of  
**sorbitan** oleate was maintained after 10 batches of  
**esterification** reactions, indicating good enzyme stability.  
Subsequent analysis by HPLC indicated that the product of the  
**esterification** catalysed by the immobilized lipase contained a  
significantly greater amount of monoester (approx. 80%) compared to the  
composition obtained by chemical synthesis (approx. 50%).  
CC B (Biotechnology)  
CT *CANDIDA*; **EMULSIFIERS**; **ESTERIFICATION**; **IMMOBILIZED**  
**ENZYMES**; **LIPASES**; **OLEIC ACID**; **SURFACTANTS**; *CANDIDA ANTARCTICA*;  
**SORBITAN**  
TN Novozym 435

=> d 1135 3-11,13-17,19-28 all

L135 ANSWER 3 OF 28 FSTA COPYRIGHT 2004 IFIS on STN  
AN 2003:A1709 FSTA  
TI Solubilization patterns of lutein and lutein esters in food grade nonionic  
microemulsions.  
AU Amar, I.; Aserin, A.; Garti, N.  
CS Correspondence (Reprint) address, N. Garti, Casali Inst. of Applied Chem.,  
Hebrew Univ. of Jerusalem, 91904 Jerusalem, Israel. Tel. 972 2 6586574/5.  
Fax 972 2 6520262. E-mail garti(a)vms.huji.ac.il  
SO Journal of Agricultural and Food Chemistry, (2003), 51 (16) 4775-4781, 12  
ref.  
ISSN: 0021-8561  
DT Journal  
LA English  
AB Lutein, a naturally occurring carotenoid, is widely distributed in fruits  
and vegetables and is particularly concentrated in the *Tagetes erecta*  
flower. Epidemiological studies suggest that a high lutein intake (6  
mg/day) increases serum levels that are associated with a lower risk of  
cataract and age-related macular degeneration. Lutein can either be free  
or **esterified** (myristate, palmitate or stearate). Both are  
practically insoluble in aqueous systems, and their solubility in food  
grade solvents (oils) is very limited, resulting in low bioavailability.  
To improve its solubility and bioavailability, free and **esterified**

lutein were solubilized in U-type food grade microemulsions based on ethoxylated **sorbitan fatty acid esters**, **glycerol**, R-(+)-limonene and ethanol. Some of the main findings were as follows: reverse micellar and water in oil (W/O) compositions solubilized both luteins better than an oil in water (O/W) microemulsion, and maximum solubilization was obtained within the bicontinuous phase; free lutein was solubilized better than the **esterified** one in the W/O microemulsion, whereas the **esterified** lutein was better accommodated within the O/W microemulsion; vegetable oils decreased solubilization of free lutein; **glycerol** and alcohol enhanced solubilization of both luteins; and solubilization was surfactant-dependent in all mesophase structures, but its strongest effect was in the bicontinuous phase.

CC A (Food Sciences)

CT BIOAVAILABILITY; CAROTENOIDS; **EMULSIONS**; SOLUBILITY; LUTEIN; MICROEMULSIONS; SOLUBILIZATION

L135 ANSWER 4 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

AN 2001(10):T0945 FSTA

TI Investigating the molecular heterogeneity of polysorbate **emulsifiers** by MALDI-TOF MS.

AU Frison-Norrie, S.; Sporns, P.

CS Correspondence (Reprint) address, P. Sporns, Dep. of Agric., Food & Nutr. Sci., Univ. of Alberta, Edmonton, Alta. T6G 2P5, Canada. Tel. 780 492 0375. Fax 780 492 4265. E-mail psporns(a)afns.ualberta.ca

SO Journal of Agricultural and Food Chemistry, (2001), 49 (7) 3335-3340, 24 ref.

ISSN: 0021-8561

DT Journal

LA English

AB MALDI-TOF MS was used to determine the molecular composition of polysorbate **emulsifiers**, polysorbate 60 and polysorbate 80, which are commonly used as food additives. The technique was able to provide polysorbate mass profiles in <2 min. 2',4',6'-trihydroxyacetophenone monohydrate was chosen to be the matrix, as it easily facilitated desorption and ionization, provided good resolution, and allowed for fast and simple preparation of the sample. By addition of aqueous 0.01M potassium chloride, species were resolved exclusively as K adducts in the positive ion mode. MALDI-TOF MS analysis before and after saponification indicated the presence of unbound ethylene oxide polymers, as well as free and **esterified sorbitan**- and sorbide-based species. Some evidence for the presence of disorbitan-based species was provided. Also illustrated were the polydispersity of the oxethylene chains, the degree of **esterification**, and the identity of **esterified fatty acids**.

CC T (Additives, Spices and Condiments)

CT **EMULSIFIERS**; MASS SPECTROSCOPY; MS; POLYSORBATE 60

L135 ANSWER 5 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

AN 2001(10):T0918 FSTA

TI **Emulsifiers**.

AU Gaupp, R.

CS Gruenau - Ingredients for Lipids & Antioxidants, Illertissen, Germany. Tel. +49 7303 13 516. Fax +49 7303 13 203. E-mail lipids.group(a)cognis.de

SO World of Food Ingredients, (2001), June/July, 72-73

ISSN: 1566-6611

DT Journal

LA English

AB Use of **emulsifiers** in the food industry to guarantee consistent quality of raw materials and foods, thereby allowing manufacturers to meet consumer demands for high quality foods at attractive prices, is discussed. Aspects considered include: commonly used **emulsifiers** (lecithin (E322), mono- and diglycerides of edible **fatty acids** (E471), mono- and diglycerides of edible **fatty acids esterified** with natural organic acids (E472), polyoxyethylene **sorbitan**-monooleate (E433), **glycerol**-polyethylenglycol-ricinoleate (E476)); effects of **emulsifiers** during production, storage and consumption of foods; and actions of **emulsifiers** in food **emulsions** (ice cream and bread).

CC T (Additives, Spices and Condiments)

CT **EMULSIFIERS**; FOOD INDUSTRY; FOODS; QUALITY

L135 ANSWER 6 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

AN 1999(06):T0458 FSTA

TI [Hydrophilic homogeneous monoglyceride **formulations** and process for their manufacture.]

IN Heidlas, J.; Zirzow, K. H.; Wiesmueller, J.; Ober, M.; Graefe, J.

PA SKW Trostberg AG; SKW Trostberg, 83308 Trostberg, Germany

SO German Federal Republic Patent Application, (1998)

PI DE 19724605 A1

PRAI DE 1997-19724605 19970611

DT Patent

LA German

AB Hydrophilic, homogeneous monoglyceride preparations suitable for use as **emulsifiers** contain a **glyceride** component with >40% monoglycerides and a water-free liquid formulation aid, preferably a diol or triol, with good water solubility. This diol or triol component is present at a ratio of 1:0.1-1:1 relative to the monoglyceride fraction of the **glyceride** component. The **glyceride** component preferably contains **esterified** saturated and unsaturated C12-C24 **fatty acids**, which may optionally be substituted **fatty acids**. A process for manufacture of these **emulsifiers** is described. [From summ.]

CC T (Additives, Spices and Condiments)

CT **EMULSIFIERS**; MONOGLYCERIDES; PATENTS

L135 ANSWER 7 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

AN 1998(06):B0735 FSTA

TI Enzymatic synthesis of **sorbitan** esters using a low-boiling-point azeotrope as a reaction solvent.

AU Sarney, D. B.; Barnard, M. J.; Virto, M.; Vulfson, E. N.

CS Correspondence (Reprint) address, E. N. Vulfson, Biotransformations Sect., Inst. of Food Res., Earley Gate, Whiteknights Rd., Reading RG6 6BZ, UK. Tel. +44 1734 357000. Fax +44 1734 267917. E-mail janya.vulfson(a)bbsrc.ac.uk

SO Biotechnology and Bioengineering, (1997), 54 (4) 351-356, 30 ref. ISSN: 0006-3592

DT Journal

LA English

AB **Sorbitan** esters, which are a group of surfactants of interest as **emulsifiers** in foods, were synthesized enzymically by lipase-catalysed **esterification** of **sorbitan** in organic solvents. **Sorbitan** was itself prepared chemically by dehydration of molten **sorbitol**. The enzymic reaction was performed using Novozyme® 435 (Candida antarctica lipase from Novo

Nordisk A/S, Bagsvaerd, Denmark). The reaction was carried out in azeotropic mixtures of tert-butanol and n-hexane, and a partial phase diagram was used to determine the temperature necessary for distillation of the azeotrope at a given concentration of solvents. Effects of varying concentration of the

2 solvents on overall **esterification** rate and the monoester-diester ratio in the final product were determined.

CC B (Biotechnology)

CT CANDIDA; **EMULSIFIERS**; **ESTERIFICATION**; ESTERS; LIPASES; SOLVENTS; ORGANIC SOLVENTS; **SORBITAN**

TN Novo Nordisk A/S; Novozyme 435

L135 ANSWER 8 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

AN 1996(02):B0057 FSTA

TI Interesterification of triglyceride and **fatty acid** in a microaqueous reaction system using lipase-surfactant complex.

AU Isono, Y.; Nabetani, H.; Nakajima, M.

CS Correspondence (Reprint) address, M. Nakajima, Nat. Food Res. Inst., Min. of Agric., Forestry & Fisheries, 2-1-2, Kannondai, Tsukuba, Ibaraki 305, Japan

SO Bioscience, Biotechnology, and Biochemistry, (1995), 59 (9) 1632-1635, 33 ref.

DT Journal

LA English

AB Enzymic interesterification in organic solvents can be used to modify the properties of oils and fats. Use of a lipase-surfactant complex (LSC) for interesterification in an organic solvent system was investigated. LSC was prepared by mixing an aqueous solution of lipase MF30 (EC 3.1.1.3) derived from *Pseudomonas* sp. and an ethanol solution of **sorbitan** mono-stearate. The LSC, which has 1,3-positional specificity, was used to catalyze the interesterification of triglyceride (tripalmitin) and **fatty acid** (stearic acid) in an organic solvent system with hexane or in a solvent-free system. Optimum reaction temperature for the LSC was 50°C. The LSC also had catalytic activity in a solvent-free system at 80-100°C. The optimum water content at which the enzyme had maximum activity was 100 mmol H.sub.2O/(g-LSC) for various substrates and enzyme concentration, indicating that the amount of water

required is dependent on the amount of enzyme. Ethanol and diethylene glycol could be used as water substitutes, and the optimum hydroxyl group content was 100 mmol [OH]/(g-LSC). [From En summ.]

CC B (Biotechnology)

CT ACIDS; BACTERIA; **EMULSIFIERS**; ENZYMES; **ESTERIFICATION**; ESTERS; **FATTY ACIDS**; LIPASES; LIPIDS; *PSEUDOMONAS*; SOLVENTS; TRIGLYCERIDES; INTERESTERIFICATION; ORGANIC SOLVENTS; STEARIC ACID

L135 ANSWER 9 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

AN 1992(06):S0162 FSTA

TI [Finely-comminuted liver sausage. II. Action and optimization of **emulsifiers**.]  
Feinzerkleinerte Leberwurst. II. Wirkungsweise und Optimierung von **Emulgatoren**.

AU Cheong, S. H.; Fischer, A.

CS Inst. fuer Lebensmitteltech., Fachgebiet Fleischtech., Univ. Hohenheim, W-7000 Stuttgart 70, Federal Republic of Germany

SO Fleischwirtschaft, (1992), 72 (2) 142, 144-149, 159, 20 ref.

ISSN: 0015-363X

DT Journal

LA German  
SL English  
AB Effects of **emulsifiers** on the stability of finely-comminuted liver sausage with a liver content of 15% were investigated. Variables studied were: **emulsifier** type (monoglycerides, citric acid esters of monoglycerides, mono- and diacetyltartaric acid esters of monoglycerides, **sorbitan** tristearate); the degree of **esterification** of monoglycerides with citric acid (citric acid content 7.5 or 20%); form of addition of the **emulsifiers** (as a powder or a dispersion); **emulsifier** dose (3 or 5 g/kg); and **fatty acid** chain length of the monoglycerides (C12-C22). Batches of liver sausage were prepared with fat contents of 40, 45 or 50%. The 45 and 50% fat samples had relatively high levels of fat separation, and onset of fat separation was rapid. Stability was improved by addition of **emulsifiers**. Jelly separation was always least for the samples made with citric acid esters of monoglycerides. Sensory quality differed little between batches made with the various **emulsifiers** studied. pH was higher (approx. 6.0) for samples made with diacetyltartaric esters than in those made with the other **emulsifiers** (pH 6.2-6.3). Fat separation was lower when **emulsifier** was added as a dispersion than when it was added as a powder. Excessive **emulsifier** concentration increased fat separation. Monoglycerides with a **fatty acid** chain length of C18 gave the best results. [See FSTA (1992) 24 3S137 for part I.]  
CC S (Meat, Poultry and Game)  
CT ADDITIVES; **EMULSIFIERS**; LIVERS; MEAT PRODUCTS; SAUSAGES; STABILITY; LIVER SAUSAGES

L135 ANSWER 10 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

AN 1992(06):N0052 FSTA

TI Process for preparation of triglyceride and triglyceride **composition**.

IN Haraldsson, G. G.; Svanholm, H.; Hjaltason, B.

PA Novo Nordisk A/S; Novo Nordisk, DK 2880 Bagsvaerd, Denmark

SO PCT International Patent Application, (1991)

PI WO 9116443

PRAI DK 1990-954 19900418

DT Patent

LA English

AB Preparation of a triglyceride where all 3 **fatty acids** are C.sub.2.sub.0.sub.+ polyunsaturated (with at least 3 double bonds) is described. The triglyceride is prepared by **esterification** of **glycerol** with free polyunsaturated **fatty acid** or its C.sub.1.sub.-.sub.4 lower alkyl ester in the presence of a lipase. Polyunsaturated **fatty acids** used may include eicosapentaenoic acid or docosahexaenoic acid or combinations thereof. Triglyceride yield can be increased and levels of mono- and diglyceride decreased by removing water or lower alcohol formed during the reaction, using positionally non-specific lipase and/or using an immobilized lipase. [From En summ.]

CC N (Fats, Oils and Margarine)

CT **EMULSIFIERS**; **GLYCERIDES**; LIPIDS; PATENTS; TRIGLYCERIDES; WORLD

L135 ANSWER 11 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

AN 1992(03):N0014 FSTA

TI Chemical interesterification of olive-tristearin **blends** for margarines.

AU Gavriilidou, V.; Boskou, D.  
CS Dep. of Chem., Lab. of Organic Chem. Tech. & Food Chem., Univ. of  
Thessaloniki, Thessaloniki 54006, Greece  
SO International Journal of Food Science & Technology, (1991), 26 (5)  
451-456, 19 ref.  
DT Journal  
LA English  
AB [The possibility of using chemical interesterification as an alternative  
to isoselective hydrogenation to obtain zero-trans-olive oil products with  
good functional and nutritional properties was investigated.] Refined  
olive oil-**glycerol** tristearate blends were interesterified using  
methoxide as catalyst. The **glyceride** structure of the randomized  
fats was studied and the relationship between the structure and physical  
properties was examined. The rearranged fats were investigated for Solid  
Fat Index, melting behaviour, consistency and spreadability and the values  
obtained were compared to those of zero-trans margarines or commercially  
available products prepared from hydrogenated olive oil and other  
vegetable oils. The 80:20 and 75:25 olive oil-tristearin blends after  
randomization have properties very close to those of soft tub and packet  
margarines. [From En summ.]  
CC N (Fats, Oils and Margarine)  
CT **EMULSIFIERS; ESTERIFICATION; FATS; GLYCERIDES**  
; LIPIDS; MARGARINES; OILS; OLIVE OILS; OLIVES; INTERESTERIFICATION;  
MARGARINE

L135 ANSWER 13 OF 28 FSTA COPYRIGHT 2004 IFIS on STN  
AN 1976(04):N0149 FSTA  
TI [Method for preparing a fat **composition.**]  
PA Unilever NV  
SO Netherlands Patent Application, (1975)  
PI NL 7411482  
DT Patent  
LA Dutch  
AB A fat composition for margarine manufacture is obtained by mixing a liquid  
vegetable oil containing  $\geq 40\%$  polyunsaturated **fatty**  
**acids** with a smaller proportion of a hard fat in an amount such  
that the composition contains 0.2-5% H.sub.3 triglycerides (where H is  
C16-C24 saturated **fatty acids**). The hard fat component  
used should contain 25-60% H.sub.3- and H.sub.2T- triglycerides where T is  
mono-trans-unsaturated C16-C24 saturated **fatty acids**)  
35-70% H-**fatty acids**, 10-45% T-**fatty**  
**acids**, 0-25% M-**fatty acids** (where M is C12-C14  
saturated **fatty acids**), 15-45% M- plus T-**fatty**  
**acids** and the remainder L-**fatty acids** (where L  
is any other **glyceride** component). Preferably, H.sub.2T is  
>H.sub.3 and  $\geq 50\%$  of the hard fat components are randomly  
transesterified, i.e. the hard fat used may be obtained by randomly  
transesterifying a mixture of 2 or 3 fats, of which  $\geq 1$  is a  
hydrogenated fat containing T-**fatty acids**. The hard  
fat may also be obtained by **esterifying** a suitable mixture of  
**fatty acids** with **glycerol**. Margarines are  
prepared by **emulsifying** the fat composition with a suitable  
aqueous phase at a temperature above the mp of the fatty phase, with subsequent  
rapid cooling. The margarines obtained, in spite of a low content of hard  
fat are sufficiently hard for packaging in tubs or for wrapping, have the  
desired high content of polyunsaturated **fatty acids**,  
and are easily spreadable at refrigerator temperature of 3-8°C.  
CC N (Fats, Oils and Margarine)



CT FATS; MARGARINES; PATENTS; MARGARINE; NETHERLANDS; PATENT

L135 ANSWER 14 OF 28 FSTA COPYRIGHT 2004 IFIS on STN

AN 1971(08):P1365 FSTA

TI [Method for preparing a basic powder **mixture** for ice cream manufacture.]

PA Cosmonda Voedingsmiddelen NV

SO Netherlands Patent Application, (1970)

PI NL 6904091

DT Patent

LA Dutch

AB An **emulsifier** consisting of a mono- or di-**glyceride esterified** with an aliphatic hydroxy acid, or a partial ester of glycol and a **fatty acid**, is used in ice cream mixes containing vegetable or animal fat, dried milk, stabilizers, sweeteners, flavouring, colouring, possibly fillers, and  $\geq 1$  **emulsifiers**. **Glycerol** lacto-palmitate and/or **glycerol** lacto-stearate are preferably used, optionally in combination with **glycerol** lacto-oleate. In an example, vegetable fat, **glycerol** mono-stearate, dried milk and **glycerol** lacto-palmitate are homogenized and spray-dried, after which further ingredients are added.

CC P (Milk and Dairy Products)

CT COLORANTS; DRIED FOODS; **EMULSIFIERS**; FATS ANIMAL; FATS VEGETABLE; FLAVOUR; FLAVOURINGS; HOMOGENIZATION; ICE CREAM; INSTANT FOODS; MILK; SPRAY DRYING; STABILIZERS; SWEETENERS; ANIMAL FATS; DRIED; DRIED MILK; FATS (ANIMAL); FATS (VEGETABLE); ICE CREAM MIXES; MIX; MIXES; SKIM MILK; SKIM-MILK; SPRAY-DRYING; VEGETABLE FATS

L135 ANSWER 15 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN

AN 649387 FROSTI

TI Pourable fatty **dispersions**.

IN Gude M.; Laan J.A.M.; Floeter E.

PA Unilever NV; Unilever plc

SO European Patent Application

PI EP 1455586 A2

WO 2003051134 20030626

AI 20021125

PRAI European Patent Office 20011219

DT Patent

LA English

SL English

AB A non-hydrogenated hardstock fat for pourable and stable liquid dispersions such as liquid margarine is described. The fat composition consists of **fatty acid** residues from plant waxes. The hardstock fat is prepared by **esterifying glycerol** or a partial **glyceride** in such ratio with a reactive **fatty acid** derivative or with a mixture of such derivatives. The fat may contain monoacylglycerides having identical acyl residues such as **glyceride** tribehenate. The invention effectively structures liquid oil in contrast to prior arts that show phase separation due to poor hardstock fat.

SH FATS

CT **EMULSIFIERS**; EUROPEAN PATENT; FAT PRODUCTS; FAT SPREADS; FATS; **GLYCERIDES**; **GLYCEROL**; LIPIDS; LIQUID FOODS; MARGARINE; OIL PRODUCTS; PATENT; SPREADS; STABILITY; SURFACTANTS; YELLOW FATS

DED 28 Sep 2004

L135 ANSWER 16 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN

AN 619115 FROSTI  
TI Solubilization patterns of lutein and lutein esters in food grade non-ionic microemulsions.  
AU Amar I.; Aserin A.; Garti N.  
SO Journal of Agricultural and Food Chemistry, 2003, (July 30), 51 (16), 4775-4781 (12 ref.)  
Published by: American Chemical Society. Address: 2540 Olentangy River Road, PO Box 3330, Columbus, OH 43210, USA. Telephone: +1 (614) 447 3665. Fax: +1 (614) 447 3745. Email: acsproof@acs.org Web: <http://pubs.acs.org/jafc>  
ISSN: 0021-8561  
DT Journal  
LA English  
SL English  
AB A high intake of the carotenoid lutein is thought to increase serum levels and reduce the risk of cataract and age-related macular degeneration. To improve its solubility, the ability of L-phase, Winsor-IV food-grade microemulsions, based on ethoxylated **sorbitan fatty acid** esters, to solubilize free lutein and lutein diester was investigated. Phase diagrams were constructed and free and **esterified** lutein were solubilized. Free lutein was solubilized better than **esterified** lutein in water/oil **emulsions**, but the reverse was observed with oil/water **emulsions**. Vegetable oils decreased the solubilization of free lutein.  
SH ADDITIVES  
CT CAROTENOIDS; CHEMICAL PROPERTIES; **ESTERIFICATION**; ETHOXYLATED **SORBITAN FATTY ACID** ESTERS; LUTEIN; MICROEMULSIONS; PHASE DIAGRAMS; SOLUBILITY; SOLUBILIZATION  
DED 26 Sep 2003  
  
L135 ANSWER 17 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
AN 616074 FROSTI  
TI Pourable fatty **dispersions**.  
IN Gude M.; Laan J.A.M.; Floeter E.  
PA Unilever PLC; Unilever NV  
SO PCT Patent Application  
PI WO 2003051134 A2  
AI 20021125  
PRAI European Patent Office 20011219  
DT Patent  
LA English  
SL English  
AB A non-hydrogenated hardstock fat for pourable and stable liquid dispersions such as liquid margarine is described. The fat composition consists of **fatty acid** residues from plant waxes. The hardstock fat is prepared by **esterifying glycerol** or a partial **glyceride** in such ratio with a reactive **fatty acid** derivative or with a mixture of such derivatives. The fat may contain monoacylglycerides having identical acyl residues such as **glyceride** tribehenate. The invention effectively structures liquid oil in contrast to prior arts that show phase separation due to poor hardstock fat.  
SH FATS  
CT **EMULSIFIERS**; FAT PRODUCTS; FAT SPREADS; FATS; **GLYCERIDES**; **GLYCEROL**; LIPIDS; LIQUID FOODS; MARGARINE; OIL PRODUCTS; PATENT; PCT PATENT; SPREADS; STABILITY; SURFACTANTS; YELLOW FATS

DED 6 Aug 2003

L135 ANSWER 19 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
AN 530487 FROSTI  
TI Lecithin and co. - diverse and indispensable.  
AU Niederauer T.  
SO Zucker und Susswaren Wirtschaft (ZSW), 2000, (June), 53 (6), 159-161 (0  
ref.)  
ISSN: 1430-2446  
DT Journal  
LA German  
AB This basic guide to the structure and properties of **emulsifiers**  
lists the main characteristics and applications of lecithin and other  
commonly used **emulsifiers**, such as **oleic** and palmitic  
acid and their salts; mono- and diglycerides of **fatty**  
**acids esterified** with organic acids such as tartaric or  
citric acid; DATEM; sugar esters of **fatty acids** and  
sugar glycerides; polyglycerin esters; ammonium phosphatide;  
polyoxyethylene stearate; **sorbitan fatty acid**  
esters and polysorbates; and polyoxyethylene products.  
SH ADDITIVES  
CT ANTIOXIDANTS; APPLICATIONS; BASIC GUIDE; **EMULSIFIERS**; LECITHIN;  
PHOSPHOLIPIDS; PROPERTIES; STRUCTURE; SURFACTANTS; TYPES  
DED 18 Aug 2000

L135 ANSWER 20 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
AN 512747 FROSTI  
TI Process for the selective preparation of derivatives of monosaccharides  
and **polyols** which are partially acylated.  
IN Arcos Jimenez J.A.  
PA Consejo Superior de Investigaciones Cientificas  
SO European Patent Application  
PI EP 945516 A1  
AI 19971001  
PRAI Spain 19961004  
DT Patent  
LA English  
SL English  
AB The invention relates to an enzymic process using lipases for producing  
**polyol** (e.g. **sorbitol**) and monosaccharide esters, such  
as **esterified sorbitan** derivatives (Spans) and  
Tweens, which are non-ionic surfactants usable as **emulsifiers**  
or thickeners in the food and other industries. The enzymic process is  
more environmentally friendly and requires less extreme processing  
conditions than traditional organic synthesis. The **fatty**  
**acids** used in the process may be obtained from olive, coconut or  
palm oil, etc. The process is claimed to be an environmentally  
acceptable way of using vegetable oils produced in surplus in the EU.  
SH ADDITIVES  
CT ADDITIVES; APPLICATIONS; CARBOHYDRATES; **EMULSIFIERS**; ENZYMES;  
EUROPEAN PATENT; **FATTY ACIDS**; LIPIDS;  
MONOSACCHARIDES; OILS; ORGANIC ACIDS; PATENT; **POLYOLS**;  
PRODUCTION; REACTIONS; SPANS; SUGARS; SURFACTANTS; TWEENS; VEGETABLE OILS  
DED 28 Jan 2000

L135 ANSWER 21 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
AN 508930 FROSTI  
TI Lipid chemistry - fat substitutes.

AU Linden G.; Lorient D.  
SO New ingredients in food processing: biochemistry and agriculture.,  
Published by: Woodhead Publishing Ltd., Cambridge, 1999, 289-314 (0 ref.)  
Linden G.; Lorient D.  
ISBN: 1-85573-443-5

DT Book Article

LA English

AB The principles of lipid crystallization are outlined. The chapter describes the structure, functional properties, modification, and applications of **fatty acids**, glycerides (monoglycerides, **polyglycerol** esters of **fatty acids**, and esters of **sorbitans** and polysorbates), phospholipids (lecithins), **emulsifiers**, and fat substitutes (modified lipids, carbohydrate-based fat substitutes, and protein-based fat substitutes). The physico-chemical properties of the esters of **sorbitans** and polysorbates are tabulated, and figures are presented that illustrate lipid crystallization, the structure of **esterified** monoglycerides, the fractionation of soya phospholipids, the structure of lecithin, and the structures of fat substitutes.

SH ADDITIVES

CT APPLICATIONS; CHEMICAL STRUCTURE; **EMULSIFIERS**; FAT SUBSTITUTES; **FATTY ACIDS**; FUNCTIONAL PROPERTIES; GLYCERIDES; LIPIDS; MODIFICATIONS; MOLECULAR STRUCTURE; ORGANIC ACIDS; PHOSPHOLIPIDS; PROPERTIES; SURFACTANTS

DED 30 Nov 1999

L135 ANSWER 22 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN

AN 497046 FROSTI

TI Sisterna reveals all about its sucro-esters.

AU Millet P.

SO Aromes Ingredients Additifs, 1999, (April-May), 5 (21), 46-47 (0 ref.)  
ISSN: 0337-3029

DT Journal

LA French

AB This article describes sucro-esters from Sisterna. Sucro-esters are additives that are neither chemical nor natural. They are non-ionic **emulsifiers** produced through **esterification**. The sucro-esters obtained have a hydrophile/lipophile balance in the range of 1-16, compared with 2-8 for **sorbitan** esters, 3-5 for mono- and diglycerides, and 22-5 for **glycerol** esters. Sucro-esters are biodegradable and digestible by humans. They are a powder without flavour or odour, and are stable to temperature and pH. Their applications include egg-based patisserie, frozen dough, and low-fat biscuits.

SH CEREAL PRODUCTS

CT BAKERY ADDITIVES; BAKERY PRODUCTS; BISCUITS; DOUGH; **EMULSIFIERS**; FROZEN BAKERY PRODUCTS; FROZEN DOUGH; FROZEN FOODS; FUNCTIONAL PROPERTIES; LOW CALORIE BAKERY PRODUCTS; LOW CALORIE BISCUITS; LOW FAT BAKERY PRODUCTS; LOW FAT BISCUITS; PASTRY PRODUCTS; PATISSERIE; SUCROSE ESTERS; SUGAR ESTERS; SURFACTANTS

DED 30 Jun 1999

L135 ANSWER 23 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN

AN 428603 FROSTI

TI Process for preparing nonionic surfactant **sorbitan** **fatty acid** esters with and without previous **sorbitan** cyclization.

AU Giacometti J.; Milin C.; Wolf N.; Giacometti F.

SO Journal of Agricultural and Food Chemistry, 1996, 44 (12), 3950-3954 (21 ref.)  
DT Journal  
LA English  
SL English  
AB **Sorbitan fatty acid** esters are non-ionic surfactants, which can be used as **emulsifiers** and stabilisers. The course of the **esterification** reaction of hexitols and a long-chain **fatty acid** at different temperatures was investigated. The reaction course was followed by determining the acid value after 15-150 minutes. Sorbital esters of lauric acid were prepared in the presence of p-toluenesulfonic acid as catalyst. The results showed that the conversion of lauric acid was improved if sorbital was previously cyclised.

SH BIOCHEMISTRY  
CT CYCLISING; **ESTERIFICATION**; **FATTY ACIDS**;  
LAURIC ACID; MECHANISMS; REACTIONS; **SORBITAN**; SURFACTANTS  
DED 13 Feb 1997

L135 ANSWER 24 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
AN 378198 FROSTI  
TI Oil-in-water type **emulsified** fat and oil composition.  
IN Kameoka T.  
PA Snow Brand Milk Products Co. Ltd  
SO Japanese Patent Application  
PI JP 06209704 A 19940802  
AI 19930114  
NTE 19940802  
DT Patent  
LA Japanese  
SL English  
AB An **emulsified** fat and oil composition containing animal or vegetable fats, stable at ambient temperature even after heating, is described. This **emulsion** does not cause feathering and oil separation even when added to coffee, black tea, etc. Animal or vegetable fats and oils with a specified solid fat index are blended with water and a **sorbitan fatty acid** triester or a **polyglycerol** saturated **fatty acid** ester of specified degree of **esterification**. The blend is **emulsified** to obtain an oil-in-water **emulsion** with the desired properties.

CT COFFEE; **EMULSIONS**; HIGH; OIL IN WATER; PATENTS; STABILITY; TEA  
DED 17 Jul 1995

L135 ANSWER 25 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN  
AN 306973 FROSTI  
TI The fractionation of **glyceride mixtures** by extraction.  
AU Weidner E.; Czech B.; Ender U.; Peter S.  
SO Fett Wissenschaft Technologie, 1992, 94 (12), 467-8  
NTE Summary of a paper presented at the 48th Annual Meeting of the German Society for Fat Science, Essen, Germany, 1992.  
DT Conference Article  
LA German  
AB Monoglycerides are widely used as **emulsifiers** in the food industry. Mixtures of mono-, di- and triglycerides are obtained by **glycerolysis** of triglycerides, **esterification** of **fatty acids** with glycerin or enzymic splitting of fats.

In this paper, the fractionation of mono-, di- and triglyceride mixtures by supercritical fluid extraction with propane is reported. The separation of glycerin from stearates, oleates, cocoates and **glycerides** of palm oil was investigated using a continuous countercurrent mixer-settler apparatus.

SH ADDITIVES

CT **EMULSIFIERS; GLYCERIDES; PRODUCTION; SEPARATION**

DED 23 Mar 1993

L135 ANSWER 26 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN

AN 285317 FROSTI

TI Finely comminuted liver sausage. Mode of action and optimization of **emulsifiers**, part 2.

AU Cheong S.H.; Fischer A.

SO Fleischwirtschaft, 1992, 72 (2), 142-9+159 (8pp.) (20 ref.)

DT Journal

LA German

SL German; English

AB The influence of monoglycerides of edible **fatty acids**, citric **acid** esters of monoglycerides, monoacetyl and diacetyl tartaric acid esters of monoglycerides and **sorbitan** tristearate on the stability of finely comminuted liver sausage was investigated. The effects of adding the **emulsifier** as a powder or hydrated dispersion, the amount added and the length of the monoglyceride **fatty acid** chains were also examined. Lipophilic **emulsifiers** extended the waiting time and reduced fat deposition. As degree of **esterification** increased, the fat deposit increased and jelly deposit decreased: waiting time was extended. Stearic acid monoglycerides had the best effect on stability and sensory quality.

SH PROTEINS

CT **EMULSIFIERS; LIVER SAUSAGES; MEAT PRODUCTS; QUANTITY; SAUSAGES; STABILITY; TYPE**

DED 6 May 1992

L135 ANSWER 27 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN

AN 152706 FROSTI

TI Processing of fats and oils.

AU Young F.V.K.; Poot C.; Biernoth E.; Krog N.; O'Neill L.A.; Davidson N.G.J.

SO The lipid handbook, edited by F.D. Gunstone. London: Chapman and Hall, 181-247 (257 ref. En). REFERENCE ONLY., 1986

DT Book Article

CT **ADDITIVES; APPLICATIONS; BUTTER; CATALYSTS; CITRIC ACID; COLOUR; COLOUR COMPOUNDS; COMPOSITION; COMPOUNDS; COMPUTERS; CONDITIONING; CONTINUOUS; CONTINUOUS EXTRACTION; CONTROL; DAILY INTAKE; DAIRY PRODUCTS; DEGRADATION; DETERIORATION; DIACETYL TARTARIC ACID ESTERS; EMULSIFIERS; ENZYMES; EQUATIONS; ESTERIFICATION; ESTERS; EXTRACTION; EXTRACTION EQUIPMENT; EXTRACTION SYSTEMS; FATS; FATTY ACID ESTERS; FRACTIONATION; FRUITS; GUMS; H L B VALUE; HANDLING; HEXANE; HYDROGENATION; HYDROLYSIS; INTAKE; INTERESTERIFICATION; LACTIC ACID; LECITHIN; LEGISLATION; MARGARINE; MODIFICATION; MONOGLYCERIDE ESTERS; MONOGLYCERIDES; NEUTRALIZATION; NEW PRODUCTS; ODOUR; ODOUR COMPOUNDS; OILS; OILSEED OILS; OILSEEDS; PACKAGING; PALM FRUITS; PALM OILS; POLYGLYCEROL ESTERS; PRE; PREPROCESSING; PRESSING; PROCESS CONTROL; PROCESSING; PRODUCTION; PROPERTIES; PROPYLENE GLYCOL; PURIFICATION; PURIFICATION EQUIPMENT; PURIFICATION SYSTEMS; RAW MATERIALS; RECOMMENDED; RENDERING; REVIEW; SOLVENTS; SORBITAN ESTERS; SOYA OIL; SPOILAGE; STANDARDS;**

STEAROYL LACTYLATES; STORAGE; SUCCINIC ACID; SUCROSE ESTERS; SURFACTANTS;  
SYSTEMS; WATER; WAXES; WINTERIZATION

DED 7 Sep 1987

L135 ANSWER 28 OF 28 FROSTI COPYRIGHT 2004 LFRA on STN

AN 93396 FROSTI

TI **Emulsifiers.**

AU Food and Agriculture Organisation.

SO FAO Food and Nutrition paper, No. 4, Specifications for identity of  
purity, thickening agents, anticaking agents, antimicrobials,  
antioxidants, emulsifiers, 243-323 . . , 1978

DT Book Article

LA English

CT ACETIC ACID; AMMONIUM PHOSPHATIDATE; CALCIUM STEAROYL LACTYLATE; CHOLIC  
ACID; CITRIC ACID; DESOXYCHOLIC ACID; DETERMINATION; DIACETYL TARTARIC  
ACID ESTERS; DIGLYCERIDES; DIOCTYL SODIUM SULPHOSUCCINATE;  
**EMULSIFIERS; ESTERIFIED; ESTERS; FAO; FATTY**  
**ACID ESTERS; GLYCERYL ESTERS; INTERESTERIFIED; LACTIC ACID;**  
**LECITHIN; MONOGLYCERIDES; PHOSPHATIDATE; POLYGLYCEROL ESTERS;**  
**POLYOXYETHYLENE 40 STEARATE; POLYOXYETHYLENE 8 STEARATE; POLYOXYETHYLENE**  
**SORBITAN MONOLAURATE; POLYOXYETHYLENE SORBITAN**  
**MONOOLEATE; POLYOXYETHYLENE SORBITAN MONOPALMITATE;**  
**POLYOXYETHYLENE SORBITAN MONOSTEARATE; POLYOXYETHYLENE**  
**SORBITAN TRISTEARATE; POLYOXYETHYLENE STEARATE; POLYSORBATES;**  
**PROPYLENE GLYCOL; PURITY; RECOMMENDED; RICINOLEIC ACID; SODIUM STEAROYL**  
**LACTYLATE; SORBITAN MONOPALMITATE; SORBITAN**  
**MONOSTEARATE; SORBITAN TRISTEARATE; STEARYL CITRATE;**  
**SUCROGLYCERIDE; SUGAR ESTERS; TYPE**

DED 16 Jun 1982

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